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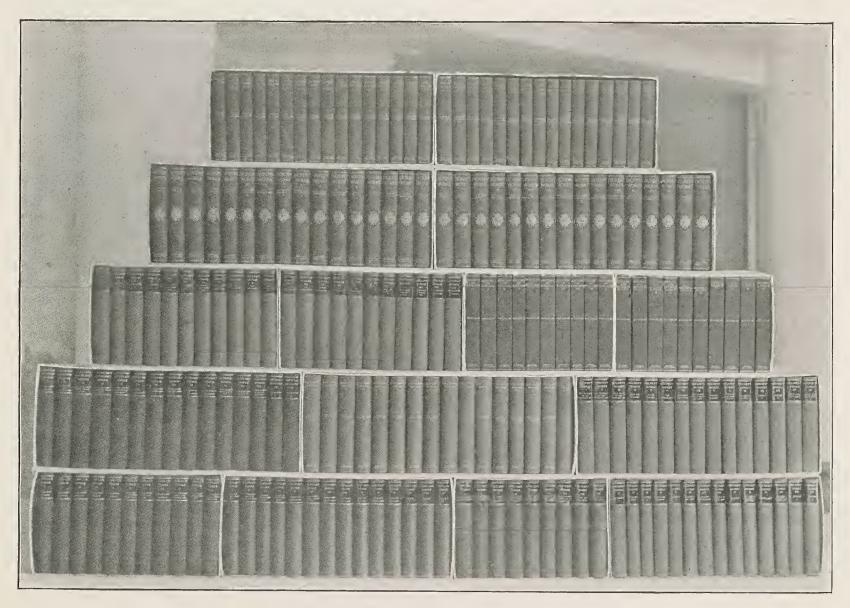
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THE STEREOSCOPIC PHOTOGRAPH.

FOR THE HOME AND SCHOOL.

DANIEL J. ELLISON, D. D., EDITOR.

Vol. I.

SEPTEMBER, 1901.

No. 2

'Tis pleasant through the loopholes of retreat

To peep at such a world, to see the stir

Of the great Babel, and not feel the crowd

—Cowper

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SCULATE AND THE SECOND SECOND

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Among the experiences of my life to which I look back with peculiar interest, as having been fraught with more than ordinary significance and whose influence upon my future cannot be over-estimated, are those which gather about my successful attempt to interview President McKinley, Mr. Gladstone, Queen Victoria and Presdent Loubet, when I was but sixteen years of age, and when I had but twenty-five dollars in my pocket.

What I am about to relate is but the old story of the persistency and the reward of earnest endeavor, elements which must be regnant in every truly successful life.

Five years ago last Spring I was living in a small town in southern Illinois, and I lived there the kind of life which most boys live in towns of that size. Of

course I went to school each week-day during nine months of the the year, and before and after school I was always busy earning money enough to buy my clothes and to pay the small expenses which come to a boy while he is living at home and attending school. In the spring and early summer I occupied my mornings in tilling the large garden in our back yard at home, and in selling the vegetables I raised there. Every morning between seven and eight o'clock I went around with my basket of rhubarb, lettuce and radishes, and usually sold about forty cents worth of "green stuff" before it was time to go to school. In the winter, when there were no vegetables to sell, mother and I made mince-meat, and I ground up horse-radish in our meat-chopper and sold these table delicacies instead.

After school in the evenings, and on Saturdays, I was busy keeping the Public Library clean. The Library was only a small institution in our town, and as its janitor I received the munificent salary of two dollars a month. I had the fires to make, the rooms to sweep, and the stairs to scrub, and occasionally I assisted the librarian in passing out the books. This part of the work was good training for me, because I learned to know and love good literature, and was eventually inspired to do some writing myself.

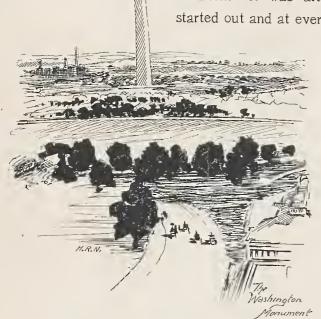
I was happy and contented with this work at home until I was fifteen years old, in the Spring of 1896. I was then seized with an overwhelming desire to go to Chicago and get work. I had read so much about the city, and was so fascinated with what I had heard, that I made up my mind I could never be happy anywhere else. And then in my work at the Library I had occasion to read many books for boys, and in some of those books boys had left their homes in small towns to work in great cities, and all the boys I read about had become rapidly rich and famous. So I thought that if I could leave our town and secure a position in Chicago, there might be a chance for me to become rich and famous too.

My mother didn't encourage me in this idea. She said she had no doubt there were many boys who had been born and raised in the city, and who couldn't get work. So she thought I wouldn't stand much chance of succeeding where so many others had failed. But I had saved fifteen dollars as a result of my vegetable trade, and with this to

pay my expenses for a few days, I determined to visit Chicago and make an effort to secure a position.

I left home the day after school was out, and when I reached the city I went to a cheap boarding-house to live for the first few days of my stay. The next morning after

my arrival I bought a newspaper and started out to answer the advertisements calling for boys to work. It was after eight o'clock when I started out and at every place I called I was in-



formed that they had already hired a boy. I soon realized that if I was to secure a position I would have to get out much earlier in the morning.

The next day I was up much earlier, and outside the first office at which I called I found about forty boys waiting in the hallway. They were being taken

inside one by one, and answering the questions of the man who was to do the hiring. It was finally my turn to go in, and I seemed to stand the examination very well. He liked my handwriting, and said I looked as though I could make myself useful. Finally he asked me whether I was living with my parents, and when I confessed that I was alone in the city, he said I certainly wouldn't suit. "We never hire boys of your age who are living alone in Chicago," he said. I must have looked disconsolate, for he called me as I was about to go out. "You might come in tomorrow," he said, "and see if I have found anyone I like."

This was some encouragement for me, and I was on hand again early the next morning. He shook his head, and said that he hadn't decided. I went several times after that, and each time his answer was the same. I had been trying for other places, and was beginning to realize that there were several boys in Chicago for every available place, so that I saw that my only hope was to get the place for which I had first been examined. On my sixth visit I asked the man to give me a few days' trial, and he finally consented to do so. He told me afterward that he didn't really think I'd suit, but he wanted to get rid of my coming

around every morning and asking for work. So I have always thought that perseverance counted more than any other quality in securing my first city place.

I kept this position as office-boy during the entire year that I worked in Chicago. My wages were three dollars and a half a week and I often found it very hard to make ends meet upon so small a sum. It was of course out of the question for me to live in any boarding-house, however cheap, so I hired a cheap furnished room and established there a sort of light-housekeeping arrangement. Having anticipated some such scheme, I had brought with me from home a small coffee-pot, a stew-pan, and a skillet, together with a few dishes and a knife and fork. I bought myself a tiny alcohol lamp, and with these utensils I managed always to cook my own breakfast in my room. I tried making some rather elaborate dishes at first, but after a week or two I was well content with an egg and some toast and coffee. I usually took a light lunch with me to the office, and in the evening I bought my dinners at a cheap boardinghouse for sixteen and two-thirds cents each, or six for a dollar. I had no car-fare to pay, as the room was within walking distance of the office, and by economizing in every possible way, and getting as many invitations as possible out to dinner, I was able to come out even at the end of every week. And so long as I was making my own expenses and living in Chicago, I felt very much a man, and was consequently happy.

In the evenings I used to work at the Auditorium Theatre, where are given the weekly concerts of the Theodore Thomas Orchestra. I had read a great deal about the organization, and was anxious to hear it play, but the admission was more than I could afford. So one evening I went to see the manager of the theatre and asked him if I couldn't work my way in to hear the music. He told me that if I wanted to go through the audience renting operaglasses, he would be glad to allow me in and to pay me ten cents commission on each glass I rented. I lost no time in accepting this proposition,

and for several weeks 1 went up and down the

aisles of the Auditorium calling out "Op-er-a Glas-ses!"

After Christmas the Grand Opera



Company came on from New York for a season of four weeks. I was then given one of the check-rooms and every evening before the performance I checked coats and hats in the foyer. There were two boys in each room, and the one with whom I worked cared nothing for the music, so I was always able to go in during the acts and listen to the opera. We earned quite a little in gratuities at the check-room, and when the Opera season was over I had saved twenty-five dollars by this extra night-work. This money I placed in the savings bank. I didn't know that I would need it for any particular purpose, and I certainly didn't deposit it with the idea of traveling to Europe in the Spring. Nothing was further from my thought at that time, but boys of sixteen are apt to reach decisions quickly.

As I said in beginning my narrative, when I went to Chicago from home I had the same idea that most boys have when they go to large cities to get work. I thought that my progress would certainly be very rapid (according to the books I'd read), and that, at the end of a few weeks, I would find myself on the high road to fame and fortune. But my career was sadly unlike the one I had pictured in

my mind. In April I had been in the city nearly eleven months, and I was still doing the same work, and without

an increase of salary, though I had tried my best to please. It is little wonder that I began to think that the lot of an office-boy is very discouraging, and to look

about for something better to do. For a long time my chief ambition had been to work as a reporter and write things for the newspapers. I thought if I could only see my name in a newspaper at the end of an article I would have reached the height of all ambition, and one week in April I took my noon lunch-hours and called to see about all the newspaper editors in Chicago. I told them that I was very anxious to be a reporter, and would they please give me a trial? When they learned that I was barely sixteen, most of them laughed, and asked me if I hadn't better wait a few

U.S. Capital Building

years before beginning work. Only one of them consented to discuss the matter with me. Mr. H. H. Kohlsaat, proprietor of the Chicago Record-Herald, told me the simple fact that everybody, in order to write well, must have something to write about, and he advised to get some material for articles and then to visit the editors again. "It is always easy to sell good stuff," he said.

For many days I tried my best to think of something I could do to get material for newspaper articles, but the

ideas didn't seem to come at all, and I was much discouraged until I, at last, thought of a scheme with which I was at once delighted. For some time I had been reading accounts of the Queen's Jubilee Celebration which was to take place



in London, and all at once it occured to me that if I could only get to London, and see the Jubilee, I would certainly have something to write about for the editors. Finally I had thought of the one thing of all others for me to do, and in a few hours I had the trip carefully planned out in my mind. Of course it wouldn't be easy to accomplish the trip, since I had only twenty-five dollars with which to start, and my original plan was to work my way on a lake steamer from Chicago to Buffalo. Having a very poor idea of distance in the eastern States, I thought that Buffalo and New York City must be very near together, and that I could easily walk from one place to the other, if the car-fare was too much. Once in New York I would work my way across the Atlantic on a steamer of some kind, and once in London I would send letters to the editors, they would forward large checks in payment, and after that it would all be smooth sailing.

I went around to tell the editors of my plan, and I hoped that some of them would be sufficiently interested to pay me some money in advance on account of the articles I was to send. But they all seemed confident I would never reach the other side, and refused to give me any money.

So I was finally obliged to start with just my twenty-five dollars, and this didn't discourage me, for I felt sure I would reach the other side, and knew I could send over some articles the editors would find worth printing.

I wasn't obliged to work my way from New York to Buffalo. Mr. Kohlsaat was good enough to give me a pass as far east as Philadelphia, and this was a very substantial assistance to me. On my way east I noticed that the pass provided I could stop over at Washington, and as soon as I read this I determined to take advantage of the privilege and make an effort to see President McKinley. I thought that if I were going abroad with the announced intention of interviewing Mr. Gladstone and other famous persons there, I had better start out by seeing my own President if I could.

When the train pulled into the Capital City I checked my band-box (in which I carried my luggage) at the station, and went to the White House the very first thing. I found several guards at the door, and told them that I wanted to see Mr. Porter, the President's Secretary, at which information they allowed me to go upstairs to the general waiting-room. This room was crowded with office-seekers and others who desired interviews, and after I had been seated a while a colored gentleman of large size and great dignity came up and told me it wasn't any use for me to wait. "The Secretary ain't got time to talk to no boys to-day," he said. I told him that time wasn't valuable to me, and that I would like to wait. I kept my seat, and after I had been there a while longer I saw Mr. Porter pass through the room. I recognized him from the pictures I'd seen in the newspapers, and when he came back through again I stopped him. I explained the object of my trip abroad, and how anxious I was to see the President before I went. He seemed interested in my story, and encouraged me to wait. "If you'll sit down there until after four o'clock, when the President's office is closed, and all these people are sent away, I think I can get you in all right," he said, and of course I waited.

At four o'clock those in the room were sent away, and Mr. Porter came for me. We went to the President's office, but he had gone, and we then proceeded through several private apartments until we came to the President and Mrs. McKinley seated in the living-room. I was introduced, and asked to sit down, and I was made to tell them as much as I knew about the trip I was taking to Europe

They were exceedingly pleasant, and did everything possible to make me feel at home, and when I left, at the end of a few minutes, I was indeed in love with the President and his wife. I went out of the historic building, and down Pennsylvania Avenue to the Capitol, feeling overjoyed at the success of my visit. My trip was certainly beginning well, and I had every reason to feel happy.

If I had known the experiences which were awaiting me in New York in the succeeding days, my feelings might have been different.

Part II of this series will appear in the next number.

HARRY STEELE MORRISON,

the famous boy traveler, was born in the little town of Mattoon, 111., in November, 1880, and therefore, he is not quite twenty-one years of age. The present series of articles are an account of his early struggles to win a place for himself in the world. During the past two years young Morrison has delivered over two hundred and fifty lectures in all parts of the country. On July 11th he started to work his way on a trip around the world in order to gather material for articles which will appear from time to time in "The Stereoscopic Photograph. He will study the condition of affairs in the Philippines and interview the Emperors of Japan and China.

Morrison left New York City on board the U.S. Transport McClenan, enrolled as a common seaman, but he will not do duty as a seaman; he will serve as a check-clerk in the store room, checking off the supplies as they are given out to the steward of the ship. The first stop the steamer will make after leaving New York will be the Madeira Islands. The next stopping place will be Gibralter, where John Bull's mighty fortress holds the gateway of the Mediterranean. About the middle of August, Port Said, at the entrance of the Suez Canal, will be reached, and an account of his experiences in going through that mid-summer fiery furnace, the Red Sea, will be found in our next number. Manila will be reached about the middle of September, after which the young fellow will find it hard traveling as he will then leave the transport and strike out alone, making his way through strange and oft-times partly uncivilized lands. He expects to be back in New York sometime in January.

On his first trip across the Atlantic, when he boarded the ship which took him to London, a tin cracker-box and a paste-board shirt-box contained all his effects. When he returned from his trip he had a first-class trunk filled with good wearing apparel. This time he started off with a dress-suit case, and when he returns he hopes that the large sum of his possessions will lead the Custom House officials to take him for a multi-millionaire or at least a prosperous business man.

In behalf of our subscribers and ourselves we wish him a "bon voyage" and a safe return to "Yankee-Land;" but we realize, as he himself does, that unseen dangers lurk for him beyond the seas, and thrilling experiences await him, which will call forth his utmost grit and physical endurance.

AN ENGLISHMAN'S VIEW OF WASHINGTON.

No greater calamity could possibly overtake this country than to have the spirit of true Americanism die out in the hearts of its citizens; and in these days of tremendous industrial energy and commercial supremacy, we need, more than ever, to see to it that the principles of the loftiest patriotism are not overlooked and forgotten by us. It is an old saying "Out of sight, out of mind." We need to see the things that make for patriotism. Nothing can show these "things" to an American better than a trip to Washington. It ought to be the duty of every American's life to see Washington. Even to a foreigner such a trip is inspirational. The eminent English writer, Mr. Frederick Harrison gives his impressions of such a visit in a recent number of The Ninteenth Century. Speaking of the White House, he says:

WHITE HOUSE AND CAPITOL.

"The White House, as the Executive Mansion is called, is interesting for its historic associations, which exactly cover the ninteenth century, with its portraits and reminiscenses of Presidents and statesmen, and its characteristic simplicity and modest appointments. It is not a convenient residence for a President with such great responsibilities. But, as the term of residence is usually so short and the associations of the house are so rich, it would be a pity to change it for a pretentious modern palace. In the meantime the quiet old mansion, merely a fine Georgian country house in a pleasant park, serves to remind the American citizen of the democratic origin of his Chief Magistrate, who is certainly not yet an Emperor. The White House was a residence suitable for men like Jefferson, Lincoln and Grant, and it seems a not unfitting office for their successors."

Mr. Harrison's enthusiasm over the Capitol at Washington is but the result of an accurate and appreciative estimate of this famous and impressive structure, and it should make Americans desirous of seeing it for themselves.

"The Capitol at Washington struck me as being the most effective mass of public buildings in the world, especially when viewed at some distance, and from the park in which it stands. I am well aware of certain constructive defects which have been insisted on by Ferguson and other critics; and no one pretends that it is a perfect design of the highest order either in originality or style. But as an effective public edifice of a grandiose kind, I doubt if any capital city can show its equal. This is largely due to the admirable proportions of its central dome group, which I hold to be, from the pictorial point of view, more successful than those of St. Peter's, the Cathedral of Florence, Agia Sophia, St. Isaac's, the Pantheon, St. Paul's, or the new Cathedral of Berlin. But the unique effect is still more due to the magnificent site which the Capitol at Washington enjoys. I have no hesitation in saying that the site of the Capitol is the noblest in the world, if we exclude that of the Parthenon in its pristine glory. Neither Rome, nor

Constantinople, nor Florence, nor Paris, nor Berlin, nor London possesses any central eminence with broad open spaces on all sides, crowned by a vast pile covering nearly four acres and rising to a height of nearly three hundred feet, which seems to dominate the whole city. Washington is the only capital city which has this colossal centre or crown. And Londoners can imagine the effect if their St. Paul's stood in an open park reaching from the Temple to Finsbury Circus, and the great creation of Wren were dazzling white marble, and soared into an atmosphere of sunny light."

But, after all, to Mr. Harrison, as well as to all true Americans, not the White House nor the great marble pile, the Capitol, but sweet, charming Mt. Vernon, is the most sacred spot on this entire Continent.

MOUNT VERNON.

"Of all that I saw in America, I look back with most emotion to my visit to Mount Vernon, the home and burial place of George Washington. I saw it on a lovely spring day, amid thousands of pilgrims, in the inauguration week. On a finely wooded bluff, rising above the grand Potomac River, stands the plain but spacious wooden house of the founder of the Republic. It has been preserved and partly restored with perfect taste, the original furniture, pictures and ornaments supplemented by fit contemporary pieces. It enables one perfectly to conjure up an image of the homely, large, and generous life of the President before the war called him to the field, and after he had retired from all cares of state. We fancy him sitting under the spacious eastern portico, with its eight tall columns, looking out over the broad landscape of forest and river, or lying in his last sleep in the simple bed, with its dimity coverlet, and then laid to rest in the rural tomb below the house, which he ordered himself, and in which his descendants have insisted on keeping his remains. Gen. Grant lies beside the Hudson at New York, in a magnificent mausoleum palpably imitated from the tomb of Napoleon in the Invalides. How infinitely more fitting and more touching is the Spartan simplicity of Washington's burial place—an austere cell within his own ancestral ground; yet not a morning's drive from the splendid capital which the nation has named after its heroic founder-how much more fitting and more touching is this, than the imperial mausoleum to which they have carried the bones of the tyrant who ruined France! It has been frequently attempted to remove the sarcophagus in which Washington lies from Mount Vernon, his home, to place it under the dome of the Capitol. But as yet it has been wisely decided to do nothing that can impair the unique legend which has gathered round the memory of the Western Cincinnatus."

"In these busy days," said a friend of mine, "an ordinary man must either be on his wedding trip or looking for an office in order to get a sight of Washington, but I mean to go sometime." Well, sometime, let us hope that we shall all go, but, in the meanwhile, you will be surprised and gratified, if you have not already possessed yourself of a set of the finest stereoscopic views of Washington, to discover how near "the real thing," the actual place, they are after all.

A REALISTIC, PRESERVATIVE ELEMENT IN HISTORY.

D. J. ELLISON, D. D.

N inherent characteristic of the races of men has ever been the desire to preserve the memory of their great ones, and this desire has shown itself in ways crude or elaborate, in accordance with the degree of civilization to which they have attained. Many of the greatest structures on earth to-day were built as the monuments as well as the tombs of men, and, like the pyramids, bear witness to certain historical personages. But this tendency is by no means confined to ancient days, as is shown by the imposing tomb of Napoleon in Paris, of Wellington in London, and that of Grant beside the Hudson. Although, in a certain sense, all such structures serve as historical reminders, pointing their stony fingers back along the pathway of the years, yet men have felt in them the lack of much that is essential to a just and satisfactory representation of their famous characters, and it was this feeling of their insufficiency that prompted the Egyptians, and others, to embalm their dead, thus preserving their very bodies and features, and imparting to

touch of immortality. To the ordinary observer, and at the present time,

such immortality is not to be desired; for one can but shiver, even on a hot and sweltering summer day when, standing in the Museum at Gizeh, a suburb of Cairo, he looks upon the weird locks of lifeless hair and the yellow, wrinkled, parchment-like features of the Pharaoh of all the

progressive days to realize the full measure of their aspirations, and to make actual what they blindly sought for, A Realistic and Preservative Element in History.

It remained, however, for the inventive genius of these

The New York Times of June 9, 1901, in an article reviewing Pope's St. John, says:

"The study of biography in our time is instinct with a twofold purpose. The one is character, the other inspiration. Microscopic analysis has dissolved the gloss with which political and social enmity has oftentimes surrounded great men, or brushed away the halo lifted up by the hero worshipper. To get at the genuine man has been the aim of the biographer."

Too often the great names of history have, to the vast majority of men, stood for vague and nebulous characters, mythical personalities altogether, who never lived as flesh and blood realties upon this earth.

for this is, that we do not see

all the vast fraternity of their great ones a CZAR OF RUSSIA them, as did their

The reason

contemporaries, in the familiar costume of their everyday life and with the surroundings which formed a part of their very existence. To have seen Julius Caesar as he crossed the spacious Forum on his way to Pompey's Senate House on that fatal Ides of March, and to have seen him in the perfect and life-sized representation which is furnished to-day by the stereograph, would add immeasurably to a correct estimate of the man; and if, in addition, also by means of the stereograph, we could stand in the very presence of "the deep damnation of his taking off," how vastly clearer and truer would be our conception of it all, for we would then see the actual forms and faces of the actors, and these not on a flat surface, as in the case of an ordinary photograph or picture, but in

Egyptians, who compelled the Israelites to make

bricks without straw. The real Pharaoh we do not see; the Pharaoh of the dignified bearing, of the proud, cruel glance, of the splendid apparel attended by a vast retinue and ablaze with imperial magnificence. That monarch has passed away, and, in his place, we have a hollow loathsome shell with just enough of the human about it to make it positively hideous. But, considering the limitations of their scientific knowledge, these old Egyptians did the best they could to preserve the memory of the past, supplementing their cold but massive tombs by placing within them written records, and along side of these was laid a body which was practically imperishable

three dimensions, as realistic as though we stood beside them in that far land and long ago. And if to-day—I refer to it most reverently—we had such a representation of the Gospel scenes, and especially of the Man of Nazareth as he sat beside the Sea or walked the rocky paths of Judea, and could avail ourselves of but one deep, eager glance, how vastly different would He be to us ever after! Such a glance would shatter much of our dreamday and art-created Christ, but in its place, we should have the reality, the solidity of the truth. Not the Christ of the lily-white brow and delicate hands and pristine robes, possibly, but the bent and worn, the sun-blacked and goat's-hair mantled Christ; and while, at first, we should feel the sense of loss, if we could but sit

sense of loss, if we could but sit

down and look into that divine
face, and gaze long upon
that battered, burdened
form, we should

PRESIDENT METANCE

AND PRES

but a charming character-study from real life, from which the discrepancies and uncertainties that gather about the great men and famous places of anci-

sons and scenes as vivid and accurate, color and motion

excepted, as the realties themselves. If you question this

statement, take the stereographs which accompany this Magazine as premiums and look at them through the

stereoscope, and then you will realize how singularly

fortunate future writers and students of history will be,

when they come to the consideration of historical celebrities of whom they will have stereoscopic representations.

History then, so far as it relates to our own and coming

times, will not be the mere bones and dry-dust that

many of us found it to be in our college days, or like

the bureau which the boy got for a birth-day present and

which was so hard to open that he

a love, far surpassing the thought of man. Then, we should have a real, flesh and blood Christ, a Veritable Character in history, a substantial actuality, whereas now many of us have but a flabby, rosy sentimentality, as transient and ephemeral as the glow of the setting sun on a summer cloud.

While the great characters of the distant past must remain more or less indistinct in their physical characteristics and environments to the men of to-day, we are to be congratulated upon having in the stereograph a means of disseminating marvelous representations of perent times shall have passed away.

Prof. A. H. Sayce, M. A., L.L. D., D. D., the famous professor of Egyptology at Oxford, writing from Cairo, March 24th, 1900, after he had studied a set of stereographs representing "Egypt and its Wonders," says: "Each of them is a study in itself; it is at once clear, artistic and well chosen. I cannot conceive of anything better either for educational purposes or for preserving a permanent memorial of a country and its inhabitants." And this is not the testimony of a novice carried away by a burst of sentimentality, but the calm, mature judgment of one of the greatest scholars of our time.

"Blest be the Art
... Which can Immortalize."
Cowver

see above it

all, a glory, a beauty and

ON TO SPARTA!

CHARLES H. BAKER.

THE name of Sparta has always attracted me, for Spartan brevity and courage have ever been held up as models for the rising generation. The fact that a real live town, outside of railroad communication and isolated by lofty mountains, still existed under the name of the ancient address of Lykourgos (gone to his fathers a trifle over 2700 years ago), has always made the plain of the Eurotas a worthy point of pilgrimage for traveler and student alike.

As I read my instructions—" Go to Sparta," somehow at once from the dusty chambers of memory and university days came trooping the shadowy forms of Leonidas and Menelaos and Helen, with their following of war, and old Epaminondas who stood out against imperialism in Sparta, as do some of our misguided men to-day.

Railroad traveling in modern Greece is like traveling elsewhere less twenty per cent. comfort, forty per cent. cleanliness and fifty per cent. speed. Leaving the railroad you take to the road, where it exists; if not, you take a mule, or rather he takes you. He is the most humble, "ornery" beast that walks. He simply goes where he likes, and it is often a question when he nabs a bit of thistle, dropping his head suddenly to do this, whether you don't reach the thistle first, over his head. In order to travel comfortably take along some sauces, jams, etc. The first thing you'll want en route is tea, sugar, condensed milk, etc., and a spirit lamp. Learn to eat olives, to drink resinous wine (tastes like tarred rope steeped in vinegar), and to sleep with four fleas in the bed all working together "with but a single thought"—to keep you awake all night.

Thus warned and equipped you take the 6:30 A. M. train from Athens for Corinth. Glimpses in passing of the ruins of Eleusis call to mind the ancient mysteries there celebrated,—while donkeys loaded with vegetables and oranges going to market, and peasants in the field at work in their ballet dancer costumes bring the attention to the modern workaday world. The women ply the hoe as vigorously as the men, and although the weather is a bit cool, the women are lighter clad than the men and all in stout shoes without stockings. Soon the canal at Corinth is reached. We look rapidly each way up and

down the cutting (like a V and cut out of rock and gravel), four miles in length and as straight and narrow as the shortsightedness of the Greeks could make it.

Soon Acro Corinth demands a glance as it sets back against Mt. Kyllene covered with snow. Here at Corinth cars are changed to go south, the train going on to Patras.

As the train passes along leisurely, one can study the life somewhat. The one-story farm houses-built of stone and tile roofs-are scantily whitewashed, and look forlorn; worn out plows, broken pots, old wagons, decrepit and rickety, give an impression of squalor or laziness. The fact is, the peasant does not see these things when he leaves the house early, accompanied by all his family, to work in the fields; he has eyes for only the cattle and sheep. At night he is too tired to clean up. After supper, if near town, he goes to a drinkshop until half-past eight or nine o'clock, and on his return he can't see on account of too much "recino" or "raki." When Sunday comes, he can't work, for he is a strict formalist. He crosses himself often at every church or wayside shrine he passes, and then gives you short coins, short weight and short bed clothes just to the instep, and you are forced to coil up to keep warm. But you forget all this when you hear the station "Phichtia" called out, the nearest to Mycenæ where Schliemann conversed with the frog of Agamemnon and brought to light that mythical hero's bones and war apparel.

A stiff climb up Mt. Jara, the mountain to the south, well repays the effort, as you then can see the ruins of Mycenæ below you laid out like a map—its gates, towers, Acropolis, Palace—all in sight. To the west lies Argos—across the plains—with the Larissa (fortress) behind it; invincible looking as in days of yore. How these petty tyrannies could exist in the olden time, in sight of each other and only a few hours ride on horseback apart, is a puzzle to the traveler. In time, we know, Argos destroyed all the others and alone survives, a busy town full of iron workers, making bits. plows, chains, stoves, tools, etc., and with a fine Saturday market. Here I saw a nice pony sold for six dollars and a sheep for three dollars. The streets are crooked, very

dirty and most of the houses are one story, and built of mud and stone.

There are no sleeping quarters (hotels) guaranteed against nocturnal visitation, and the best restaurant is perched on a hanging shelf, 7 x 20 feet, in the rear of a big native café. Here you enjoy a third-hand table-cloth and second-hand napkins, and you are content that it is no worse. During the night barking dogs add variety to your meditations, and in the morning the boiled beans, artichokes, devil-fish and "pilafi" (rice cooked in a weird way with whisperings of lamb broth one day and feathered suggestions the next) revive your spirits for the day's duties. The view from Larissa is grand, and the pathwell, ladies don't climb it often-could be improved. One thing I felt here strongly, that a great city was born, not made, that it grows from environments, and that there is always a strong incentive of some kind to build it in a particular spot; It may be a fine spring on an isolated peak, or a cross roads, or a pass, or the edge of a fertile plain. Now Argos possesses all these, and, in addition, it is near navigable waters. It must always have existed, like Damascus in Syria, from the condition of its position. From the Larissa, Mycenæ, Tiryns and Nauplia are in full sight and only a few hours away.

Leaving Argos, the railroad runs south through the passes of the mountains that it is always climbing, till Tripoli is reached, on the great plain of ancient Tegea. An hour's ride north in a carriage and you are at Mantinea and the spot where Epaminondas fell. The plain is very unhealthy here and all the nice looking dwellings one sees are only used for a few weeks as residences, during the vintage. The women are comely, but have the greatest unwillingness to be photographed. They say the priests forbid it. The old ones say it is a sin to be photographed,—the young ones say "why should you have my face?" So you stereograph her as she protests.

From Tripoli to Sparta is a nine hours ride; the road skirts yawning precipices, but, considering the character of the country through which it passes, it is well laid out and kept in good condition. At night, sometimes, carriages drive over the precipitous sides, landing their occupants on the rocks below in a more or less dilapidated condition; but as the last carriage that went over contained the tax collectors, the people made no reclamations and "leave well enough alone."

The easy climb of the road affords some beautiful views of winding valleys and snowy mountains seen through that magical azure tint that glorifies the landscapes in all Mediterranean countries. After three or four hours a halt is made at a khan, the horses are unhitched and everybody hunts up lunch baskets, and an hour's rest is taken. Horses eat. Passengers get out and walk a bit to straighten the limbs. In the meantime other carriages have come up from both directions, and for half an hour the neighborhood of the khan is a medley of stagecoach, pack horses, barking dogs, peasants in odd costumes, and tourists all curious to see the novel ways and clothing of the others. The lunch of cold chicken, olives, bread, figs, an orange or two, and perhaps a "pasta" (a sweet like chocolate cake) is soon finished the driver having finished his resin wine, olives, goat cheese and bread-horses are hitched up and you are off again. The pass is long and winding and the mountain high, and the first sight of Sparta is delayed till within an hour of arriving there. Beyond the last khan, where you stop for a glass of water and a louconmis (like jujube and costs two cents), and after a turn in the road, Sparta comes into view.

There it lies nestling in a green well-watered plain with a background of rugged mountains capped with snow, and exactly corresponding to the description of the ancient city, as "like a village, scattered, including many beautiful gardens," and as you gaze upon it you can but think of her former boast, "No walls but the bravery of her citizens." As we descend the mountains, the houses are lost in the foliage, and the groves of olives seem like forests. The River Eurotas spreads out over a great area, and although now dry in many places, it probably formed in ancient times a valuable protection on the north. You cross the iron bridge and soon enter the city itself. The streets are in squares, reasonably clean, with running water everywhere and an air of thrift in the appearance of the people. The houses resemble those in southern Italy and are built of stone, stuccoed, two stories high with balconies, and all surrounded with flowering gardens. Orange, lemon and fig trees abound, and roses bloom in wild profusion.

Saturday again is market day and the peasants come in by families to buy and sell and gossip. The donkeys and horses, after unloading, are all hitched up

on a certain long street, at the end of which the pigs and sheep and goats and cows and donkeys are sold; and the squealing and bleating and blurting and jawing (for it so sounds to a stranger as the peasants bargain together) make an impression never to be forgotten. But why farmers should buy onions and lettuce and radishes to take home to eat instead of growing them, I couldn't find out. One man's reply was a shrug of the shoulders, as much as to say, the answer was beyond his ken. Everybody looked well-to-do, but many looked sickly, especially the women. The hard life, toiling early and late, in these low plains, is fraught with danger. Fever carries off many victims. You rarely see an old woman. From Sparta fifteen hundred men have recently gone to America, and visiting Americans are looked upon as successors of Cræsus.

But one comes to Sparta not for its modern attractions, although it is beautiful and peaceful, and charmingly situated in a lovely plain with running water everywhere and snow-crowned mountains, but to see the remains of "old Sparta." Well, you need to look for them out among the olive trees and along the prickly pear lanes that lead north toward the site of the old Spartan Acropolis—a low hill in the distance, fifteen minutes away from the hotel. The tomb of Leonidas is nearest, a structure in great stones, then well cut stray columns and slabs and fragments are encountered all along the pathway, till you reach the old wall of the Venetians and Turks that surrounds the site of the old city. Bits of ancient masonry, a finely chiseled capital, and a prostrate

column, tell silently the story of a former glorious structure of which they formed a part, but whose history and destruction is buried in the debris of centuries.

The site of the theatre of which some good sidewalls remain; some traces of temple sites that later on will reward excavation (the owner wants \$1,500,000 for the land, he owns all old Sparta) are now under wheat and olives. Some fragments of entablature, columns and capitals, built into later walls, attest former constructions which were destroyed in modern times. The small museum contains some valuable finds. The most striking feature of a visit to Sparta is a feeling you have of the unquestioned location of a great city. The site meets all historic references and the ordinary tourist feels satisfied he is "on the spot" where great deeds were done. Too many ruins—in good preservation from the earliest times, after a stormy history between opposing nationsare not accepted by the old traveler without a grain of suspicion as to their authenticity. Rather have a few sure remnants of antiquity, and then, from the treasures of student-day memories, as well as from the storehouse of later reading, rebuild this fallen city in your imagination, bringing to your aid all the assistance that archæology and the painter's brush have accomplished, and these old ruins will once more take graceful forms; her temples again offer grateful incense to the Gods; and the sleepy little town of modern Sparta will be hidden away in the day-dream reconstruction of ancient Sparta, the home of Lykourgos, the great legislator.

Sparta, June, 1901.



PICTURES AND STEREOGRAPHS.

M. S. EMERY,

Author of "How to Enjoy Pictures."

A FRIEND who has an inquiring mind recalls a curious bit of his childish experience. It was when he was a tiny urchin, needing to climb into a chair to reach the level of his mother's mirror, that he spent long minutes with eyes closed and lips parted, trying to discover whether he could *see* with his mouth. The experiment, however carefully repeated, brought the small investigator no satisfaction; so he sensibly yielded to nature's evidently fixed determination to devote special means to special ends.

We smile at the baby scientist. But, after all, his investigations savored more of wisdom than of foolishness. In this puzzling world it is worth a great deal to make sure, at the outset, of the uses of our tools.

The "picture" and the stereograph are essentially different things. A painter, for instance, does not attempt nor desire to give us scientifically exact information about the detailed facts of the particular river-bank or sunshiny sheep-pasture or dusky old cathedral that he portrays. What he does desire, is to give us a certain happy consciousness of harmonious shapes and colors; perhaps a sense of the real distances, or a contrast of sparkling lights and deep, luminous shadows; may be the very feelings of uplifted serenity or of mystery or of teeming life and activity that a scene embodied for his own appreciative imagination, —and all fused into oneness on his canvas, so that the resulting whole is in itself a thing of beauty. In the face of this, the artist's real intention, we cannot object to his adapting and arranging nature's detailed facts as best suits his purpose. His mission is not to reproduce what already is, but to interpret and create anew.

On the other hand, we have photographs and stereographs, which, in widely different ways of their own, do give us just those literal facts which the painter is not concerned to give.

The ordinary photograph of a landscape or an architectural subject or a group of people shows us an approximately accurate image of existing facts in the real world. If the photographer has a cultivated sense of beauty, he takes a hint from the artist, choosing carefully the most desirable standpoints from which to make his memorandum record, so that the various parts of his view may appear in the most effective relation to each other; but here he is always obliged after all to defer to the inexorable facts of actual topography and building construction. The resulting photograph stands, consequently, somewhere midway between Nature and Art. Looking at an ordinary photograph is by no means just like looking at the real things, neither are the real things here transfigured as by the artist's crea-

tive touch. What we have in the photograph is, frankly, just a record of some appearance of things, as that appearance registered itself on the photographer's negative—the sensitized glass retina of his one-eyed camera. Seeing with one eye does not give the same effect as seeing with two eyes. The photograph always falls short of reality, for this reason. But experience enables us to piece out some of its shortcomings with our own imagination, so, on the whole, the photograph serves as a convenient memorandum of the things concerned.

Still farther—very far indeed—beyond the simple photograph in point of veracity in the presentation of facts, is the stereograph of to-day. Its steady development during the last decade is in itself strongly significant of the high value set by the best thoughts of our time upon senseexperience as the basis of vigorous mental life and growth. To-day a teacher who should undertake to give mere textbook instruction in any branch of natural science would be regarded as a Rip Van Winkle, a whole generation behind the times. Young people are being sent out from the pages of their school-books to use their eyes for themselves, to collect sense-experience out of whose vitalized soil their own thoughts may grow. Older people do twenty—yes, one hundred times as much travelling and sight-seeing as their fathers did a generation ago. Think how the custom of taking annual vacations has grown within the past few years and how enormously the pleasure traffic of ocean steamers and of railroad lines, domestic and foreign, has increased: men and women were never so hungry to see the world for themselves.

It is here that the stereograph performs its unique and invaluable service. It gives us precisely what the photographer with his ordinary camera cannot give; what the artist with his brushes never tries to give,—namely, the exact visual impressions (color only excepted) which we should obtain in the presence of the actual scenes and things. It is not that we have to laboriously force ourselves to fancy or imagine we are seeing the real things when we study a stereograph. We are, for all practical purposes, in the presence of the real things.

Last summer you were traveling in Finland. You visited Helsingfors, and, while there, you went down to the open square by the harbor-side, to see the farmer-folk, in their market boats, trading with the townspeople. As you stood there facing the scene, tiny images of the boats and buildings and picturesque figures were thrown by the lenses of your two eyes on the sensitive *retinae* behind the lenses. These two retinal impressions, in some mysterious inner

laboratory of your brain, united to bring into being a mental consciousness of the things existing out in the open square before you. That is to say, by some inexplicable magic of the mind, in accordance with the work of the optic nerve, you saw the whole thing. You touched none of the people to verify your impressions. You did not need to do that. All the knowledge you needed came through those two sets of images on the retinae of your two eyes. And the difference between the images cast on the two eyes (those in the right eye naturally including a bit more around at the right side of everything, those in the left eye a bit more around the left side of things), gave you, when the two sets of images were mentally combined, a sense that the solid things really were solid, not mere silhouettes, but occupying honest space in three dimensions. You knew their forms, their variations of light and dark; and all these visual impressions swiftly translated themselves in your mind into an understanding of the human life and activity for which they stood. You realized that you were in the presence of warm, human life and homely activity, looking on at the interplay of other human minds and hearts.

No. Wait a moment.

It was not you personally who visited Helsingfors last summer. It was a stereoscopic camera, whose two lenses, stationed where your two eyes might have been, received on their own sensitized *retinae* of glass, the images of the Finnish folk. But, unlike us, the camera could have its interesting impressions rendered permanent (we often wish we might); and this was accomplished by means of chemical development and printing.

Now you place this finished and mounted stereograph in the rack of the stereoscope and adjust it to focus. What happens? The images of boats and buildings and eager sellers and thrifty buyers, thrown now upon your own retinae from the card a few inches away are absolutely identical with the images that would be received by the very same parts of your eyes from the actual men and women and boats and buildings (proportionately larger in size and farther away) if you were standing in the camera's place in Helsingfors itself. You do not have to make believe the impressions are the same. They veritably are the same. Your feeling is that of direct personal experience.

It is difficult for one who has not studied and used stereographs to believe this. I hoped rather than actually believed it before I had made a special study of the Russian series published by Underwood & Underwood; but personal experience has made me enthusiastically certain of their value as material for serious study and as a means by which to travel the world over. I suppose everybody appreciates their possibility as means of amusement and recreation.

One possible misconception of the character and mis-

sion of stereographs I might mention in passing, as, during my own novitiate in their use, it had to be cleared away by increased understanding. We are all so much more familiar with picturers of various sorts, whose fundamental characteristic is beauty, than we are with stereographs, whose fundamental characteristic is reality, that we are likely to apply hasty and irrelevant tests to these newer acquaintances. A "picture" which actually has no intrinsic beauty as a picture is a failure. But in the stereograph what we have to do with is not the bit of paper with its line-combinations and its spots and spaces of light and dark; it is out behind and beyond the card, a world into which we look through the card. What we hold in our hand is not, properly speaking, a work of art at all, but a key to everyday reality; not poetry, but rather a title deed to the plain foundation stuff out of which we have the privilege of making poetry, just as the artist himself would do, through the touch of human comprehension and insight.

Yet, distinct and different as are their spheres, the study of pictures and the study of stereographs help each other. They need each other. The artist's mission is to share his own rare, exceptional insight with the rest of us,—to help us to see as nobly and delightfully as he sees. It follows that every bit of faithful study we can give to the really fine works of great artists helps us to see more appreciatively everything in the wide world around us. The artist is our heaven-sent tutor in the matter of seeing. And, conversely, all our experience of the every-day world ought to make us more and more capable of entering into the artist's and the poet's world. Indeed, what is knowledge good for,—to what end are all our carefully hoarded stores of detailed facts about the world and the people in it, if not to be used like any sterling money, exchangeable for still better things, the power of thinking larger thoughts and answering to finer feelings?

THE TELEPHONE AND THE STEREOGRAPH.

In the telephone there is, at the two different stages, a transformation of force: 1—Sound waves. 2—Electrical undulations, 3—Sound waves again.

In the Stereograph we have: 1—Images of the real things impressed on the stereoscopic negative and fixed in the stereograph. 2—Images of the *printed images* impressed on the retinae of the eyes. 3—Impressions received on the retinae of the eyes, referred back by the mind to the original objects instead of to the intermediate photograph on the card-board.

This seems to correspond quite exactly to the telephone experience where we refer our impressions of sound waves directly back to their origin with the distant speaker, ignoring the intermediate stage of wires and electric currents.

STEREOGRAPHS CREATE AN APPETITE FOR BOOKS AND LEARNING.

D. J. ELLISON, D. D.

HAT we see, more than anything else, impresses upon us our lack of knowledge, and prompts largely the questioning of our lives. Every visible thing to a child is an interrogation point. "What is that?" or "Why is that?" are to him, the inquiries that fly off the surface of things like sparks from a blacksmith's anvil; and it is the recognition of himself as something distinct and separate from surrounding visible objects, that gives him the idea of his own individuality. The philosopher Fichte recalled how, when a child, standing at the back-door of his mother's cottage with the family woodpile near-by, upon which he was steadily gazing, there flashed across his mind the consciousness of the "ego," of his own individuality; and then, for the first time, he said "I." Knowledge is largely gained by means of contrast and comparison which, to a large degree, are made possible through the medium of sight; for "seeing is the faculty of the mind by means of which, through its appropriate material organ, the eye, we are precipient of the visible appearances of the external world;" hence, much of the sweetness of life, much of its joy and gladness, enter the mind by the jeweled gates we call "eyes." We are the possessors of the universe to the extent of our power of vision. Fields, mountains, rivers, seas, the glory of a sunset, the splendor of the starry heavens, are a part of our heritage. If we had been born blind we could never have entered into their possession. In order to add to the power of sight, and therefore to our possessions, men have invented the telescope and the microscope; thus creating a telescopic-vision which has to do with far-spaces and the magnitudes of the heavens, and the miscroscopic-vision which concerns itself with the minutiæ of the earth.

As new objects are brought within the range of our eyesight, our curiosity is intensified and our craving for knowledge increases. This thirst for knowledge can only be satisfied by books and institutions of learning. Perhaps nowhere so much as in traveling, does a man's ignorance confront him.

Walking the streets of the world's capitals, lingering beneath the shade of its splendid palaces and mighty monuments, standing before its master-pieces of art, he is conscious of the limitations of his own knowledge, and feels a desire to learn something about them; and the oftener he sees them, the more he desires to know.

Personally, I never had any great interest in the Channel Islands *until I saw them;* but, ever since, that island group, lying like a cluster of emeralds in a sapphire sea, has lingered lovingly in my memory, and I have read with keen and appreciative interest almost everything written about them that is worth the reading.

Flanked by hindrances of various sorts, most persons never have the opportunity of travel, and if the knowledge of the wonders and treasures of the world were dependent upon their visiting distant places in person, how densely ignorant they would have to remain in regard to these things. But a knowledge of the marvelous glories of nature, scenery, architecture and art, are not dependent upon a personal visit to distant places.

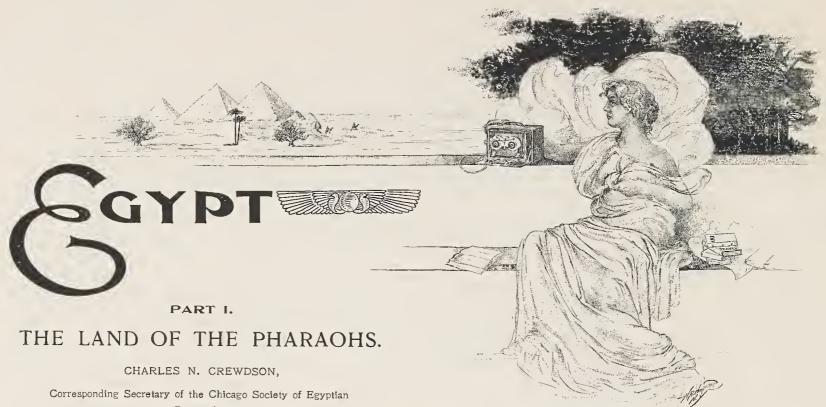
All these can be brought to us in stereographs which are life-size representations, perfect in detail and proportion and having three dimensions, and which, when used to the best advantage, can give us much of the same feelings and emotions that we would get were we on the spot, thus creating in our minds an appetite for knowledge, and an appreciation of the best literature; and then we find that even old books, once read and long since forgotten, are eagerly sought for when we have seen the places to which they refer.

To gaze upon Pompeii and then to peruse "The Last Days of Pompeii," by Bulwer; to look upon Rome, and then to read Hawthorne's "Marble Faun" ("Transformation" in England) and "Ave Roma Immortalis," by Crawford; to see Florence, and then take up George Eliot's "Romolo" and Cartwright's "Painters of Florence;" to stand before the great Cathedral of Paris, and then scan the pages of Victor Hugo's "Les Miserables" and "The Hunchback of Notre Dame;" to linger in the old, romantic, German university town by the Necker, and then, to sit alone with Henry James' "Heidelburg," is to find in both places and books a new significance and charm, adding to the reality of our visual ideas and emotions, a knowledge and a delight of which we had not dreamed.

It must not be supposed that the first look at a stereoscopic representation of a place will unfold to us all its elements of power and beauty, any more than would our first glance were we actually on the spot; these will require the element of time and a certain amount of knowledge to be fully seen and appreciated; but, having once seen the place, we will ever after read about it more intelligently, putting facts where they belong, fastening them in the right place. Whatever books would be helpful to us were we in the presence of the veritable scenes themselves, will be of equal value when read in connection with the stereoscopic representations of the place; and life everywhere will be richer and fuller because we have viewed many places in many lands and poured upon them all the light which streams from the best literature.

In like manner such scenes often incite the minds of the young to acquire an education. Years ago, I knew a young fellow who was led to take a college course by looking at a view of the Roman Forum with its broken columns, and crumbling arches; and was it not young Correggio who, standing for the first time before a master-piece of Raphael's exclaimed as he gazed upon it, "I too, am a painter!" What we see starts the torrent of questionings that sweeps through our lives, and what we see is largely the source of our pleasures, knowledge and inspirations; and therefore, it is not surprising that we come at length to feel that life, at best, is but a series of pictures set in the frame of the years, which bring us joy or sorrow; until, at last, the darkness settles, and the pictures fade away. Or as Tom Moore, Ireland's sweetest poet, sings:

"Let's take this world as some wide scene Through which in frail but bouyant boat, 'Neath skies now dark and now serene. Together you and I must float; Beholding oft on either shore Bright spots where we would love to stay, But time plies swift his flying oar, And we must away, away, away."



In shape Egypt resembles a fan with a long, crooked handle. The broad, triangular part, or the delta district is Lower Egypt; the handle or the river valley is Upper Egypt. From Alexandria on the seacoast to Cairo, which is inland at the apex of the delta, the distance is about one hundred and twenty-five miles-three and one-half hours by an express train. It is five hundred and forty-seven miles from Cairo south to the first cataract, the southern end of the handle of the fan. The delta is marshy, swampy land, at the best fit for pasturing cattle and raising wheat on the higher places. This region of the delta contains a little over five thousand square miles. The handle of our fan, the Nile valley, is a narrow strip of fertile land four and one-half to ten miles broad in Nubia, and fourteen to thirty-two miles broad in Egypt proper. It is really the bottom of a vast cañon, cut through ages by the Nile flowing northward through the eastern end of the Sahara. The cañon is therefore still flanked on either side by burning, yellow deserts,—the Arabian on the east, the Lybian on the west. Seen from the top of the Great Pyramid, the valley of the Nile looks like a single green thread in a cloth of gold, and this green thread contains less than five thousand square miles of arable land as far as the first cataract. To this we must add the Fayum, which is a huge oasis some forty by thirty miles in the western desert about fifty miles above Cairo, and only separated from the Nile cañon by a narrow ridge of cliff pierced through with a canal. It is thus really a part of Egypt. This little spot is very fertile, abounding

in flowers and fruits. No country in the world is so isolated as the land of the Pharaohs: on the north is the Mediterranean Sea with its dangerous coasts, on the east and the west the great deserts, on the south, the wild, rocky cataracts.

The greatest cities of ancient Egypt were, as is well known, Memphis, the seat of the Old Empire, and Thebes, the capital of the New Empire. The former is near modern Cairo on the west shore, the latter four hundred miles further up the river. There were, of course, many minor cities like Abydos, Edfu, Dendera, and Elkab, which were also places of importance in the old times. During the Christian era Alexandria, founded by Alexander the Great in 332 B. C., and Naukratis in the Delta, were the two greatest commercial centers. The former gradually supplanted the latter and still remains, along with Cairo, one of the chief cities of modern Egypt. Cairo was founded with the invasion of the Moslems, in 640 A. D. It is to-day the leading city of the Moslem world as well as the largest city of Egypt. Its only rival on the upper river is Assiout.

The soil is very rich but it can be worn out. This frequently happens as the result of excessive planting of cotton and sugar cane. Yet if the land is left fallow a while, the exhausted fields become fertile again. This is very fortunate as the dung of domestic animals, elsewhere used for fertilizing, is here dried and consumed as fuel by the poorer classes. The principal

crops of ancient Egypt were wheat, barley, clover,

beans, rice and flax. These are still cultivated, and, in addition, sugar-cane and cotton; the latter, introduced in 1821, has been one of the staple crops since 1863, and is displacing our own sea-island cotton in the English markets. The rich soil, moisture from the Nile, the never-ending sunshine, make this indeed a land of foliage, fruits and flowers. Around every little village, and along the roadsides, are evergreen palm trees. Apples and grapes, lemons, mandarins and melons,—all sorts of fruits, ripen here abundantly and are very cheap. One day, as I was on a ferryboat, crossing the Nile, a little fruit girl was trying to sell me some oranges. I offered her, at first, one piaster (five cents) for twelve. She refused this and I then offered her a nickel for ten. I finally bought nine for this sum—nine great, big, beautiful, delicious oranges for half a dime. She frankly confessed that she would have sold me more for my money had not her grandmother told her she would beat her with a stick if she sold more than nine for one piaster to an *Inglizi*, *i. e.* to an Englishman.

The climate is very dry, it seldom or never rains, when it does, the people are amazed, and in the ancient time of the monuments called the rain



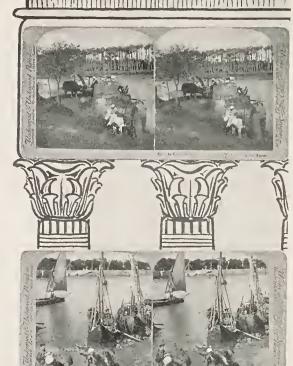
"the Nile in the heavens." Nor is it cold here, even in the winter. The little Arab "devils" run around the whole winter long bare-footed and practically naked, making life interesting for tourists in straw hats. It is to this dryness that we owe our knowledge of the ancient people. Monuments here have not crumbled away beneath

centuries of rain, but have stood through the ages to tell the story of the oldest civilization known to history.

With the sun beaming down so brightly day after day, even the green banks of the Nile would soon become as parched as the desert, were it not for the peculiarities of this most wonderful of all rivers. It is over four thousand miles long, one of its sources being three degrees south of the equator, beyond the lakes of central Africa. I say sources because there are two: that of the Blue Nile and that of the White Nile. The Blue Nile has its fountain head in the mountains of Abyssinia. As its name indicates, the water is dark; in fact, when it runs full it is muddy, the mud being washed down from the sides of the Abyssinian highlands. This very mud it is which has made Egypt; each year the rising inundation has deposited a thin layer upon the bottom of the Nile cañon. This process, which has been going on for ages and still goes on, has laid down a stratum of black soil in the Nile valley from thirty-three to fifty feet deep, and, of course, with each year it continues to become deeper. The White Nile begins among the equatorial lakes and is clear as crystal until it joins the Blue Nile at Kartoum, thirteen hundred and fifty miles from the sea. Just below Kartoum the river enters the Sahara where it must fight its way for a thousand



An Arab Market Boat.



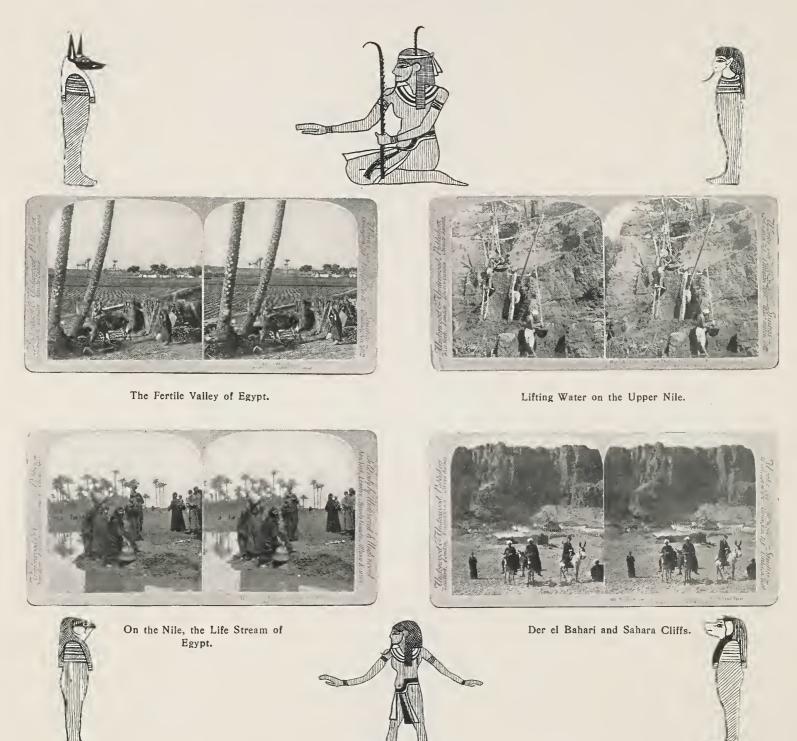
An Egyptian Sakiyeh.



Boats Along the Nile.

A Baby of the Desert.

Indian Palms



miles through sandstone, a task which it has not yet fully accomplished to its comfort; for in ten places it is interrupted by rocky masses in the stream. These obstructions fall into six groups, known as the six cataracts of the Nile. In this desert region, of course, there are no tributaries. Not far below Kartoum, just above the desert, the only one, the Atbara, offers its last contribution to the mighty river. When we consider how much of its water is consumed in its long course through the desert: first by evaporation, and second by infiltration (the oases of the desert doubtless absorbing much of its volume), we can readily

understand how much water is required to supply so long a stream, running through such a thirsty region. In the times of Herodotus the Nile pierced the sea-coast, after this long course, through seven mouths; but now there are only two of importance, one at Rosetta on the west, the other at Damietta on the east.

Every year, with great regularity, the Nile overflows its banks. The extent of the inundation is almost as constant and regular as the recurrence of the overflow itself; yet sometimes it is greater or less than the normal level. If the rainfall in the Abyssinian mountains has been slight,

the river does not rise so high; on the contrary, if the rainfall has been heavy, the overflow is great, sometimes proving disastrous to the crops. The river begins to rise slowly in the early part of June, continues to swell, at some periods more rapidly than others, until the latter part of October, at which time it is highest. It then begins to recede, slowly falling until the following June. April and May it is lowest; and during September and October it is highest. At the latter period the water spreads over all the cultivated land. A great deal of it is caught and kept in reservoirs until it is needed. The whole land is one vast labyrinth of canals used to convey the water from place to place. These canals are often much deeper down than the surface of the fields they are to irrigate; in this case the water is lifted up in two ways: either by a shaduf or a sakiyeh. A shaduf is simply the well-sweep of our grandfathers bearing a leather vessel in place of the "old oaken bucket," and a huge ball of mud at the other end as a counterpoise in the place of a stone, which our grandfathers used. It is of course, operated by hand. The sakiyeh, on the other hand, is worked by oxen attached to a crude, wooden windlass which operates huge, wooden cog-wheels; these turn an endless band of palm ropes bearing, at intervals, earthern jars. The lower end of this band hangs in the water and, as it revolves about the wheel on which it is suspended, it lifts the water to the level of the fields. In these primitive ways the people irrigate



Looking Through a Stereoscope. their fields and gardens, precisely as they did thousands of years before Christ. Painted or carved on their old, old tombs, are representations of the *shaduf*, which, as one looks upon them, seem to represent things of the present day in this land where so little has changed. There are few wells in Egypt except walking wells. Water carriers go around with skins or earthen jars full of water, thus supplying the thirsty. At any time during the day, all along the Nile, one can see these carriers filling their skins or jars.

To the dwellers in its valley this beneficent river was everything. It dominated all their thought. Instead of saying north, they said down-stream; rather than say south, they said up-stream. When their great conqueror, Thothmes III, came back from an expedition to the Euphrates, he reported having found a river which ran, not south, but up-stream. But the Nile was useless unless controlled. There was no rain to refresh their fields and the people were forced to use the water of their river. The need of canals developed their engineering skill. With the canals came plentiful crops, increased resources and mechanical skill for building pyramids and temples. The works of the engineers and architects of ancient Egypt have never been surpassed in mechanical ingenuity; nor were they left bare; but to adorn their temples, sculptors and artists were needed, and the work of the chisel and the brush was not less marvelous in its perfection. In a country of clear days and cloudless nights, the sky was always before them, and their wise men upon the house-tops studied the motions of the stars, and thus were developed astronomers and mathematicians, who aided much in the construction of such buildings.

The Nile, likewise, had its effect upon the social customs, the laws and the religion of the Egyptians. Each year when the river was fullest, the people of all the land would assemble to feast, to rejoice and to glorify their great water-god. Every year the overflowing waters would, to a great extent, obliterate their corner-stones and give the dishonest man a chance to usurp the possessions of his neighbor. Thus a sense of justice was developed out of necessity, and land laws were formulated. Little by little, as ages passed, their culture developed to that high level which it had attained at the beginning of European civilization and that contributed so largely to the industrial and commercial life of the ancient world in the Mediterranean basin.

Editor's Note:—The foregoing article will be followed in our next issue by another article from Mr. Crewdson on "The People of Egypt."

BENEFICIAL EFFECT TO THE EYES FROM USE OF THE STEREOSCOPE.

A. EDWARD DAVIS, A. M., M. D.,

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THERE is a mistaken idea on the part of the public at large that the use of the stereoscope is often detrimental to the eyesight rather than beneficial. Especially is one apt to be of this opinion if he uses the stereoscope for a few moments and finds that it tires the eyes and makes them feel a little stiff and uncomfortable. Another misconception, which is almost universal on the part of the laity in regard to the eyes, is that poultices are good for the eyes when inflamed from any cause; when, as a matter of fact, to poultice an eye with bread, tea leaves, flax seed, or anything for that matter, is the worst thing that could be done for it. We naturally ask: How came these two wrong ideas to become so firmly fixed in the minds of so many people, and intelligent people, too?

First, in regard to poultices, it may be explained as follows:

Anything warm, like a poultice, when applied to an inflamed eye, soothes it, and the sufferer naturally thinks that if the pain is relieved the remedy must be all right. Unfortunately an injurious effect is the frequent result, for the poultice often steams or peels the lining membrane (the delicate epithelium) from the front of the eye, which tends to cause ulceration, and in this way the eye is often permanently injured, or lost even, before the patient is aware of the injury done.

Second, the common error, or mistaken idea, that the use of the stereoscope is injurious to the eyes came about from the fact that often the eyes feel a little tired or sore after using it for the first time. The person then jumps at the conclusion that the fault is in the stereoscope and does not stop to consider that it may be in the lack of proper adjustment of his own eyes. But even where the eyes are properly directed one is so fascinated with the stereoscope, and the scenes before him, especially on first using it, that he overdoes it, so to speak, and tires the eyes before he knows it. In fact, the stereoscopic use of the eye is similar to playing golf, tennis, riding a wheel or any healthful physical exercise; when unaccustomed, the eyes, like our muscles, become sore if we overdo it; but with regard to the muscles we think nothing of it, knowing that after a little more use they will become hard and lose all soreness. With such a delicate organ as the eye, however, we are more timid—as we should be—especially if we do not understand the cause and wherefore when anything goes wrong with it.

The use of the stereoscope cannot possibly do the eyes any harm and is capable of rendering great aid to them by having them work together and in unison. The literal meaning of the word stereoscopic vision is solid, firm or fixed vision. Now, in order to get this firm or fixed vision we must not only have the eyes properly focussed on an object, but have them correctly and accurately directed to the object. This is the mission of the stereoscope, i. e., to direct the eyes properly.

Most people are unaware of the fact that when we look at an object an image of the object is formed on

exactly corresponding parts of the retina in each eye, and that these two images are merged into one in the sight perceptive center of the brain, so that we see the object singly, or as one. If, from any cause, the muscles which control the eyes should become a little weakened so that one eye is not properly directed to the object looked at, the image of the object formed in that eye would not correspond with the image of the object on the retina of the other eye, and double, or blurred vision would result. By practice with the stereoscope these weak muscles are exercised and the eyes stimulated to take the proper direction, and both eyes are made to work together. It may make the eyes tired at first, but as the muscles are developed, this sore and tired feeling passes away, and a feeling of comfort and ease takes its place. Besides, when both eyes are used together the vision is much better than where one eye alone is used: that is, we are better able to see an object in all its dimensions—width, breadth and thickness. This can be easily verified by looking at an object with only one eye, then with both eyes at the same time. With one eye we are able to judge fairly well as to the width and length of an object but not accurately as to its depth or thickness. In other words, we do not get true form or figure perception using one

Many people use but one eye and are totally unaware of the fact, thinking that they are using both eyes together. They see but do not see perfectly. A striking example of this occurred in my practice this past winter: A young minister, thirty years of age, who had cross-eye, or cast in the eye, as it is called by the laity, when a child of eight years had the eye operated on and almost straightened, but not quite so. The eye was so nearly straightened that one could not ordinarily detect the cast; he himself thought he was using his eyes together until I put a stereoscope before them, when he discovered he saw double. One week's practice with the stereoscope and he saw objects singly, perceiving for the first time the correct form of objects in their third dimension. It is unnecessary to say he was highly gratified and delighted with the result. While this is a striking case of its kind—the minister being above the average in intelligence—it is not an uncommon one.

Eyes which do not properly focus should, of course, have correcting glasses—that is spectacles or eye glasses; after which, if the eyes do not see an object accurately, practice with the stereoscope should follow.

It may also be of interest to the public to know that about eighty per cent. of all the cases that require the services of an occulist come from some error in the focus of the eyes or because of weakness of the muscles, and, hence, improper direction of the eyes as a result. It is, therefore, readily observed that here is a wide and useful future field for the stereoscope, and its beneficial effect upon the sight has been unappreciated in the past simply through ignorance of its great and many virtues.

SHADOW AND SUNSHINE IN CHINA.

PROF. JAMES RICALTON.

(From the advance sheets of "China through the Stereoscope," a book explanatory of one hundred Chinese Stereographs, published 1901, by Underwood & Underwood.)

'HE first view opposite is that of the "Dying-place," where discouraged poor are allowed to come and die in Canton, China. Dying places are ordinarily in homes or in hospitals, but this poor fellow has neither a home nor a hospital in which to die. We are here in a vacant space near the river,—a sort of a common, littered with refuse and scavenged by starving dogs. It has been named "the Dying-place," because poor, starving, miserable outcasts and homeless sick, homeless poor, homeless misery of every form comes here to die. world scarcely can present a more sad and depressing spectacle than this field of suicides; I say suicides, because many that come here, come to voluntarily give up the struggle for existence and to die by sheer will force through a slow starvation. They may be enfeebled by lingering disease; they may be unable to find employment; they may be professional vagrants; they come from different parts of the city, and sometimes from the country round about. They are friendless; they pass unnoticed by a poor and inadequate hospital service; they become utterly discouraged and hopeless and choose to die. Their fellow natives pass and repass without noticing them or thought of bestowing aid or alms, and here, it is not expected; they have passed beyond the pale of charity; it is the last ditch; they are here to die, not to receive alms, and no one thinks of bestowing them.

The pitiable specimen before us is near the end;—too near to heed the usually dreaded camera. (I attempted to catch a view of others, who, having a trifle more vitality left, crawled away on hands and knees.) His glassy, fixed gaze tells how soon his long, hard struggle will be over; how soon even the grimy rags that cover his nakedness will be unnecessary; his pillow is a stone; his garment is a sack; food he has none; friends not one; an uncoffined grave he will soon have; he has begged a fellow mortal "to give him leave to toil;" but it was refused him, and "here rests his head upon the lap of earth."

Would that the vast numbers who squander extravagantly and needlessly unearned wealth could witness the innumerable instances like this,—of existence so full of suffering that death is welcome. This fargone case of destitution and misery is not the only one in this last retreat of human agony; you see another in the distance, probably a new arrival, as he yet has strength to sit erect. I have been to this haunt of agony a number of times and have always found several sitting or lying in different parts of the ground. When death ends their sufferings,

they often remain several days before the tardy authorities remove the body, and when removed, it is borne to an unknown grave in the potters field. I am sure you do not care to tarry longer before the harrowing scene of the "Dyingplace." It is the darkest and the saddest, and I must show you a brighter scene.



Dying in the Dying Place.



A Chinese Bible-Woman.

Go with me to the Shameen, where we shall enter the home of a faithful missionary, and there I shall present to you a different face, a countenance illuminated by Christian "Nirvana," that of a "Chinese Bible-Woman,"—seen in the second picture of this article.

Many of these faithful teachers have suffered martyrdom. You cannot but note the maternal thoughtfulness of this face, the intelligence, the kindliness. Buddhistic asceticism has left her; almost the Mongolian obliquity of eyes has deserted her since Christian light entered her mind and Christian love her heart. She has been lifted from the low level of her sex among her own people, to the level of European culture and refinement and that, by missionary influence. Her adopted Christian religion permits her to smile, which she can do charmingly when not posing for a picture; it also permits her to shake hands Western fashion, on an equality with European men and women, which she does gracefully and modestly. Her new religion has

removed her superstitious fear of the camera and she is pleased, even anxious, to have her picture taken. What a change is wrought in these people by Christian influence!

In China, women are slaves and playthings. Wives and daughters are treated as animals. Their education is practically forbidden; socially, they are ostracised; they do not appear in the streets nor at public functions, and I have been told that a Chinese gentleman is supposed to turn his back when one of the opposite sex passes on the street Under these circumstances how much emancipation means to Chinese women! Can we wonder that the law of love and equality has transformed the countenance of this Bible-Woman? A man, in China, may even kill his wife with impunity, provided he obtains the sanction of the mother, (his mother-in-law). Can we wonder either that the prayer of the Chinese woman who is a Buddhist and believes in transmigration, is often, that in the future existence she may be a man?

It would appear from views expressed by the great founder of the Indian religion, that his teachings did little to elevate the low estate of woman in China; for he refers to the "better half" in words which might afford grains of comfort to the misogynist and the hen-pecked husband. Here are his words:—"A woman's body has many evil things in it; at birth her parents are not happy; rearing her is "without taste" (distasteful); her heart fears men; she must rise early and late, and be very busy; she can never eat before others; her father and mother begrudge the money spent on her wedding; she must leave father and mother; she fears her husband and has times of travail; if her husband curse her, she is not permitted to get angry, (talk back); in youth her father and mother rule; in middle life, her husband; in old age, she is at the beck and call of her grandchildren." China would make a good penal colony for over-rampant western "woman righters.''

This Bible Woman is seated on the veranda of the home of Mr. and Mrs. Nelson, located in the Shameen. These devoted workers in the field of the foreign missions were evidently much interested in this woman, and spared no effort to enable me to secure views of native types who under their christian influence, as before intimated, had lost all fear of the camera. Bible Women perform a special work in the mission field. Mr Nelson explained to me how difficult it is to reach Chinese homes; that only men can go to the services when general meetings are held; that it is not considered proper, in China, for women to assemble with men, or even for young women and ladies of the better class to be seen on the street.

In order, therefore, that the homes may be reached and mothers and daughters taught to forsake their idolatrous ways, elderly native Christian women

are chosen and specially trained and educated for this work. Elderly women are chosen because they will be tolerated and respected when young women would be insulted; and those trained for this special work are called Bible-Women. This Bible-Woman is fifty-three years of age; her name is Mak; she belongs to the middle class, is a widow and had an only son who died of the plague three years ago. The son had been converted to the Christian religion some time before he was stricken with the dreadful malady. On his death-bed his faith in his new-found "Nirvana" was so firm and strong as to turn his mother, who had never been in a Christian Church, to the same source of consolation and hope. She applied to Christian women to learn about Jesus; then she applied for admission to the Woman's School of the American Board. She was admitted; but she could neither read nor write. She at once set to work to learn the Chinese characters; and did not ask for aid, but supported herself by selling needles, thread, yarn, etc. She made rapid progress in reading and in gospel knowledge. Mr. Nelson says it is a common thing to see her with her testament in hand going out from the School to sit at some home and tell the "Story;" that her education necessary for the best work is not yet complete, but, even now, while doing a good work, is still engaged in educating herself; that she is very correct in her deportment, and, to note how quick she is to observe, Mr. Nelson tells how, when she first entered their foreign built house, she remarked:—"Your religion is better than the Chinese religion; you are even allowed to move your chair about and sit where you please, while in a Chinese house, chairs are not to be moved from their places against the walls."

These women are paid not more than two dollars and a half a month, barely enough for food and clothing In reference to the value and efficiency of these women in the mission field, I give Mr. Nelson's exact words in a letter to me:—"One cannot overestimate the amount of good done in China by the Bible-Woman, and there are many doing work which far outshines that of their sisters in this country (America.) It can be said of many of these humble workers, what the Lord said of Mary—"She hath done what she could."

To-day China is a puzzle among the nations, and promises to be, in the near future, a gigantic and mysterious force. During the recent Boxer uprising, we have witnessed this oldest of the world's empires, proud of her history and tenacious of her time-honored civilization, hurling back the encroachments of modernism. None of the nations of this age are so little known—so misunderstood, yet so relentlessly assailed; but when she learns her latent strength and how to use it, the aggressive cupidity of the Occident may hesitate to assail her.

THE PHILOSOPHY OF THE HUMOROUS STEREOGRAPH.

D. J. ELLISON, D. D.

SOME ARE BORN GREAT.

LAUGH is just like sunshine, lt freshens all the day, lt tips the peak of life with light And drives the clouds away:
The soul grows glad that hears it, And feels its courage strong—A laugh is just like sunshine For cheering folks along.

A laugh is just like music,
It lingers in the heart,
And where its melody is heard
The ills of life depart;
And happy thoughts come crowding
Its joyful notes to greet—
A laugh is just like music
For making living sweet!"

An old philosopher long ago assured us that "there is no circumstance of our life more mysterious than laughter," and while this

statement is as true to-day as when it was first written, yet we have come to know that laughter is very nearly related to the noblest children of the brain, and is allied to the highest and most indispensable wisdom. Carlyle says, "the man who cannot laugh is not only fit for treasons, stratagems and spoils, but his whole life is already a treason and a stratagem." The two great generators of laughter are wit and humor.

With as a brilliant flash that burns the sensitive flesh and oft-times leaves a scar that lingers through the years. Humorhas a charming lustre that carries no sting; it is not poisonous like "the



SOME ACHIEVE GREATNESS

Stygian waters, which no other receptacle but a mule's hoof could hold." Wit has the element of ridicule in it, its tooth is apt to be sarcasm however cleverly it may be concealed.

"Dr. Parr," said a young student once to the great linguist—"let you and I write a book!"

"Very well," said the Doctor,—"put in all that 1 know and all that you don't know, and we'll make a big one!"

The talent for wit is the most potent for influencing men and especially assemblages of men, for he who can turn a laugh upon his opponent is generally the master of the situation. Burke on one occasion made an attack upon the government, when Geo. Onslow, who thought he had some chance of distinction by grappling with so great an antagonist, sprang to his feet and said haughtily, that he must call the honorable member to a sense of his duty and that no man should be suffered in his presence to insult the Sovereign. Burke, who had listened to this harangue with an absent, meditative air, when Onslow had disburdened himself of his loyalty, arose and gravely addressed the speaker:—" Sir, the honorable gentleman has

exhibited much ardour, but little discrimination. He should know that however I may reverence the King, I am not at all bound, nor at all inclined to extend that reverence to his ministers. I may honor his Majesty, but, sir, I can see no possible reason for honoring "—and he glanced round the treasury bench—"his Majesty's man-servant and maid-servant, his ox and his ass!"

Yet higher than wit is humor, as sunlight is superior to fire; and kinder and better than the man of pitiless wit is the sunny-tempered, mirth-loving soul,—not the mere funny man of the world's stage—the clown, but the man who, like Oliver Wendell Holmes, has entered into the meaning of laughter and seen a rippling sunbeam playing through the dark clouds of the world's sorrows and wrongs. "Give me the man," says Sterne "who laughs without knowing why." Well, there are very few people who know why they are pleased, very few who look beneath the surface of laughter and analyze its philosophy. The sources of humor are the incongruities, the idiosyncrasies of life. It roots itself in the ludicrous, the mirth-provoking. When we speak of one who has a sense of the ludicrous, we mean one who has the faculty of seeing peculiarities

or eccentricities either in speech or manner. How incongruous was the learned Professor's description of Albany written fifty years ago: "It contains 6000 houses and 25,000 inhabitants all standing with their gable ends to the street." And how eccentric was Sidney Smith's reply to the request of a friend that he would sit for his portrait to Landseer the great animal painter, the friend paying the bill: "Is thy servant a dog, that he should

do this thing?"
"He handled his
gun carelessly and
put on his angel
plumage," is a late
and incongruous
obituary notice.
A reporter writing
of a serious accident informs the
public that "a little



SOME HAVE GREATNESS THRUST UPON THEM. dent informs the

boy tried to lift himself by a mule's tail. The Doctor thinks the scar on his forehead is permanent;" and another writing in a somewhat similar vein, "A young lady, aged seventeen, raised a large family. She used a keg of powder in the cellar." We laugh at the meeting of extremes, as at two well-bred fellows, who being pretty thoroughly soaked with bad whisky, got into the gutter and after floundering about for sometime, one of them proudly said, "Let's go to another hotel, this one leaks."

How we all enjoy an anecdote that brings to light some incongruity of character. Can any of us be insensible to the following, which, while it contains neither wit nor fancy, fascinates us by its odd quaintness, its striking peculiarity: The Rev. Dr. Brown of Haddington, the well-known author of the "Self-Interpreting Bible," was a man of singular bashfulness. In consequence of this trait, as we learn from his biography, his courtship required seven years before it materialized into an engagement. After six years and a half he had gotten no further than he had been at the end of the first six days. At length this state of things became unbearable, a step in

advance must be taken, so the Doctor summoned up all his courage for the deed. "Janet," said he, as they sat one night in solemn silence, "we've been acquainted for six years an mair, and I've ne'er gotten a kiss yet; d'ye think I might take one, ma bonnie girl?"

- "Just as you like, John, only be becomin' and proper wi' it."
- "Surely Janet, we'll ask a blessing."

The blessing was asked—the kiss was taken, and the worthy man perfectly overpowered by the blissful sensation, most rapturously exclaimed, "O woman! but it is gude—we'll return thanks!"

How much embarrassment and suffering might have been spared the good Doctor, if he had been permitted to follow the example of Adam, who fell asleep a bachelor, and awoke to find himself a married man.

Everyone loves Washington Irving, not alone or chiefly for the purity and clearness of his style, but for the rippling, rythmical merriment that pulses through all his writings, like the sweep and flow of a crystal stream through a June meadow. And who of us, who appreciates the wealth of English literature, but would feel a sense of irreparable loss if the humor that Dickens has dashed through his works with so masterful and lavish a hand, should somehow take to itself wings and vanish away. It is not too much to say that life for millions of hearts would be a veritable "Dead March in Saul" if they had never known Mr. Pickwick and Sam Weller and had never encountered Mr. Micawber and Tom Sawyer of medical fame. When Sam Weller sends the valentine to Mary, poor old Tony Weller's prophetic soul dreads the consequences and he bursts forth pathetically: "To see you married Sammy—to see you a deluded wictim, and thinkin' in your innocence that its all werry capital-its a dreadful trial to a father's feelings Sammy." Tony had a mortal fear of widows; he looked upon them as a kind of tigress who went about seeking to devour innocent bachelors and widowers, or worse still, to entice them into matrimony against their will. Speaking of a railroad journey he had recently taken, he said, "I was locked up in the same carriage with a livin' widder; and I believe it was only because we was alone and there was no clergyman in the conveyance that that 'ere widder didn't marry me before we reached the half-way station." Tony was an old stagedriver and hated railroads as the very incarnation of all that was evil. "As for the ingin" said he, "as is always pourin' out red-ot coals at night and black smoke in the day, the sensiblest thing it does, in my opinion, is when there's somethin' in the way, and it sets up that frightful scream, which seems to say, "Now here's two hundred and forty passengers in the werry extremity of danger, and here's their two hundred and forty screams in one.'

The humor of men differs under the influence of the different periods and vicissitudes of their lives. What is humiliating to a boy may be a source of pleasure to a man. Do you recall how, when a lad at school, no worse punishment could be meted out to you than being compelled to sit between two girls? But oh! the marvelous transformation wrought by the rush of the years! Later on, we submit to such a situation without the shedding of a single tear!

But however much our tastes or inclinations may change to-

ward other things, it is always a lamentable condition of affairs when a man becomes graver and harsher as he grows older; when the humor goes out of his soul as the iron wears out of his blood, for wrapped about with many a burst of merriment is some great principle that serves as one of the structural truths of life. And this is true of nothing more than of wisely selected sets of humorous stereographs like the set reproduced in the first part of this article, and entitled "Greatness;" which illustrates the common interpretation of the famous saying, "Some are born great, some achieve greatness, and some have greatness thrust upon them." In the popular conception, greatness and bigness are identical terms, and as such, we Americans have been accustomed to use them, to the amusement and derision of the rest of the world. We are a great people, we claim. Why? Because we measure geographically 2500 miles from ocean to ocean, besides Alaska which contains nearly as much more. We are a great people because we number 75,000,000 inhabitants; because our gold, silver, coal and iron industries outweigh those of any other country in the world. On the same principle our greatest citizen is always found in the dime museum (the fat man) since he outweighs the rest of us. The champion heavyweight prize fighter is king, since physically, he is monarch of all he surveys. We Americans can see ourselves as the rest of the world sees us by looking at these three stereographs.

The first one represents our conception of being born great, a baby weighing twenty pounds with a lusty voice,—a fit illustration of young America when he whipped John Bull. The second represents our idea of the greatness that may be achieved by pouring into the body politic a stream of gold, oil, beer,—a guzzler of material wealth. The third represents greatness thrust upon us, as when we assume more responsibilities than we can handle and then boast of our added grandeur, the superimposed weight that may crush us to fragments. Greece was but a small patch on the world's surface, yet its greatness compelled the homage of a world, and it still abides in the influence of its art and philosophy. Rome was but a single city like the city of New York, and never as large as the latter, but its masterful genius for law and government overspread the civilized world.

When we laugh at the humorous stereograph are we laughing at ourselves? And when the laugh has ceased and we lay the stereographs away, would it not be well for us to ask if our utmost endeavors as citizens are used to add to our bigness or to our greatness; to gain new markets and larger wealth and vaster physical power—a material weight under which we shall stagger to our ruin if attended by no high unselfish principles,—or shall our aim be first of all to attain true greatness, markets or no markets, wealth or poverty, until the world shall come to know that for all the measurements of noble manhood, for liberty and opportunity, for philanthrophy and universal brotherhood, America stands supreme? If these comical, life-sized representations shall in any measure teach us this great truth, we shall grow wiser as we laugh at them, and we shall appreciate, as never before, the philosophy of humorous stereographs.





There is no more necromancy or magic about a stereoscope than there is about a mirror; each shows objects perfect in detail, life-size and in three dimensions.

As an indication of the demand for stereoscopic goods, it may be stated that the factory at Westwood, N. J., is turning out a new stereoscope every thirty seconds.

Stereographs are invaluable in the pursuit of any study that is simplified and clarified by realistic reproductions. Their vitalizing and vivifying influence in general education must not be overlooked.

As a stereograph collector, 'tis my pride
The best of all collectors to be;
1 would search the whole world far and wide,
1ts treasures and wonders to see.

Stereoscopic photographs help to stir one's mentality by creating a passion for development. They contribute to make one's life larger, fuller, happier, by revealing new realms of beauty and grandeur.

It may be of interest to our readers to know that the publishers of this magazine employ more than 4000 college men, who defray the entire expenses of their college course by selling stereographs during their summer vacation.

The United States Government considers classified stereographs so valuable that all educational stereoscopic tours published to date, with the new extension cabinet, have been purchased for the U. S. Military Academy at West Point.

Mr. Charles H. Baker, the well-known stereoscopic photographer, whose interesting article "On to Sparta" appears in this number of The Stereoscopic Photograph, has just completed the finest and most extensive series of Grecian negatives ever produced.

We take pleasure in acknowledging the patronage of Mr. James Coates, Jr., of the celebrated cotton thread manufacturers, Messrs. J. & P. Coates, of Glasgow, who has been the largest retail purchaser of stereographs during the year past, amounting to £347 (about \$1735).

The stereoscopic photographer, Mr. W. H. Leigh, has just returned from a trip to Mexico and Yucatan, bringing back with him a large number of negatives, many of which are remarkably beautiful, and all illustrate in a striking manner the peculiar characteristics of that interesting land.

Viewing stereographs of every sort and description without method or discrimination, while of some value, is like miscellaneous reading, which has a tendency to fill the mind with incongruous material; but to study stereographs that are properly classified, must give one a vast amount of available information.

STEREOGRAPHS are as superior to single photographs as two eyes in a man's head are to one eye.

The only thing to-day which keeps pace, neck to neck, with the lightning, is twentieth century instantaneous photography.

Home-staying youths are apt to have home-spun wits, unless they come into touch with the world's best and greatest through the medium of the stereograph.

The December number of The Stereoscopic Photograph will appear in November, and will contain articles of special literary merit, interspersed with advanced stereoscopic thought. In its artistic features it will even excel the preceding numbers.

It is not generally known that the stereoscope is a veritable eye-tonic, the use of which would be beneficial to a large number of people. The article on this subject that appears in this issue of The Stereoscopic Photograph will be followed in our next number by one which will be more technical and extended.

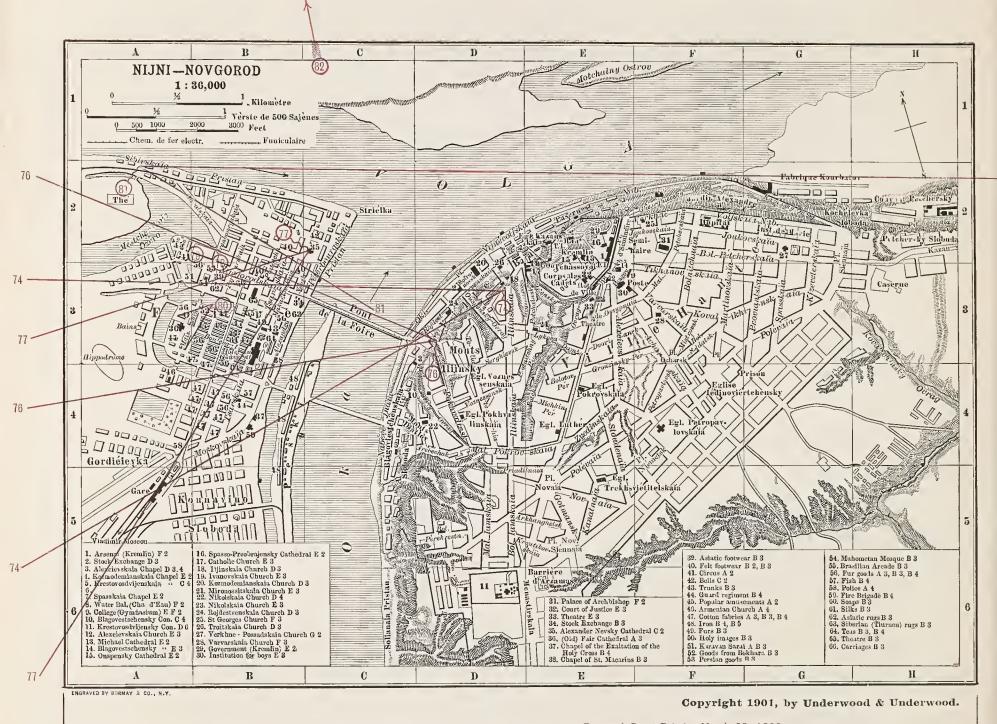
A special hand stereoscope has been prepared by Underwood & Underwood for Alfonso XIII, King of Spain, which is similar to the one made by the same firm for His Imperial Majesty, William II of Germany. These "scopes" are the finest in quality, the most elaborate in design, and the best in workmanship ever produced.

The State of Nebraska has recently purchased for the use of its School for the Deaf, at Omaha, eighteen hundred stereographs, embracing classified series of Italy, Austria, Switzerland, Russia, Greece, Egypt. Palestine, Philippine Islands, Cuba and the Spanish-American war. Also thirty-six aluminum stereoscopes for class use.

Stereographs are masters who instruct without harshness or discipline. If you interrogate them, they are ever alert to dispense knowledge, and will never evade nor deceive you, but with unwearied patience, they lead you by pleasant paths into new fields of thought; and if you are an earnest, diligent seeker after truth, they open up before you boundless possibilities.

We much appreciate the many complimentary references to The Stereoscopic Photograph which have appeared in the leading magazines and journals, both in this country and England, and regret that space forbids inserting some of them in this number. The only criticism we have seen has been that the reading matter, having been printed in pale green, was more difficult to read than if in some dark color. This suggestion we have acted upon.

"A good photographer will certainly give character to his work. There will be an individuality about it. The individuality of any good artist's work is such that we soon become acquainted with it, and are able to recognize his pictures with considerable certainty—almost at a glance. It makes little difference whether we call this quality character or individuality; the two words mean the same thing. In either case the quality results from the individual character of the worker. He puts something of himself into each of his pictures. His individuality is discernible in the picture, and is just as much a part of it as the rocks, or lake, or trees which formed the external subjects of his study."—The Photo Miniature No. 25.



Patented U. S. A., August 21, 1900. Patented France, March 26, 1900. S. G. D. G. Patents applied for in other countries.

Patented Great Britain, March 22, 1900. Switzerland, + Patent Nr. 21,211.

(1) The red lines on this map mark out the territory shown in the respective stereographs.

(2) The numbers in circles refer to stereographs correspondingly numbered.

(3) The apex (<), or point from which two lines branch out, indicates the place from which the view was taken, viz., the place from which we look out, in the stereograph, over the territory between the two lines.

(4) The branching lines () indicate the limits of the stereographed scene, viz., the limits of our vision on the right and left when looking at the stereograph. (5) The stereograph number without a circle is frequently placed at the end of each branching line (example 74) to help locate quickly the space shown in a stereograph.

(6) Sometimes the encircled number is placed where it can be seen better and a zigzag line runs to the apex to which it refers.

(7) Where the field of view in the stereographed scene is limited, its location is designated by the number of the stereograph in a circle without the branching lines.

Explanation of Map System.

NIJNI NOVGOROD.

[Extracts from advance sheets of "Russia through the Stereoscope," a book by M. S. Emery, soon to be published, explaining one hundred stereographs illustrating the Land of the Czar.]

HEN we were school children studying the geography of Europe, we learned that Nijni Novgorod, over east of Moscow on the Volga River, was famous for its annual holding of the great Russian fair. But the whole thing was vague and hazy in our minds; why this particular Russian fair should be noted away around at the other side of the world was not usually explained. Now we can clear this matter up for ourselves by seeing the Fair with our own eyes. But first of all, direct your attention to the special map of Nijni Novgorod, on the opposite page, so that we may the better get our bearings, for without an accurate knowledge of location what we see would lose much of its value. To enable us definitely to locate sections of countries shown in stereographs, a most ingenious and practical key map system has been invented. By this means we can know, in the case of each stereograph, the exact spot where we stand, the direction we look, the extent of our field of vision, as well as our geographical surroundings.



Please observe that the Volga River flows toward the east on the north of the city and the Oka River comes from the south and empties into the Volga dividing the city into two parts. A short distance to the left of the mouth of the Oka we find the number "77" in a circle, both in red. Two lines in red, branch out from near this circle toward the southwest, and each of these lines has the number "77" without a circle at its end. In the stereograph reproduced above, we are standing at the point from which these two lines start, and are looking over the territory included between them.

Nijni Novgorod is a delightfully picturesque town, built partly on hills and partly on a river bottom. As you approach it, your eyes fall upon trees and roofs and shady open spaces, roofs and trees and more roofs! Ten months in the year comparatively little business is done here, but for six or eight months in mid-summer the Fair brings

traders and visitors from all over the Empire. It is a sort of national exposition, the lineal descendant of a fair which used to be held here at Nijni Novgorod in the fourteenth century, though it was for a time removed to St. Macarius, seventy miles down the river. If we could examine in the stereoscope the original stereograph from which this reproduction was made, we would find ourselves looking across the section of the city devoted to the Fair, and before us would stand out its vast aggregation of buildings in real perspective, every object being in its true relative place and of natural size. We could even distinguish the "ikon" of the Saviour, which is found over every shop in this Fair.

There is one thing we cannot do within the Fair limits, and that is to smoke. Vigilant police officers are always on watch to prevent any infraction of this established rule. It is not a point of etiquette, but a measure for the public safety; for fires are easily started in August, the time of the Fair, and one large fire might seriously cripple many lines of business for a whole year, since traders not infrequently secure their whole year's supply from the wholesale dealers. The white church which towers over the Fair buildings belongs to the Armenians.

National Exposition as this most certainly is, there yet is evidently no attempt at architectural effect in its housing or arrangement. There are rows on rows of twostory shops with awnings over the narrow side-walks, and within is every sort of thing that anybody ever buys. In this respect it is like a multiplication of the city bazars or markets; but it is really a great deal more than that, for its mid-summer trade practically fixes the price of staple goods for the next year. Merchants from every part of the Empire have branch houses here, not merely the large dealers from St. Petersburg and Moscow, but from far north and south, east and west. Tea is brought overland from China to be sold here to Russian shop-keepers, who, in turn, will sell it to the most inveterate tea drinkers in Europe; Bokara merchants come with their rugs; and, on the other hand, every sort of Russian manufactured goods which can possibly meet the needs and please the fancy of their Turkish, Armenian, Georgian, Persian and Tartar neighbors, finds its way here to tempt pilgrims from the east and south. They say that the business done here each year during the two months of the Fair amounts to about two hundred million dollars!

Practically all these two-story buildings are shops. The few taller structures are restaurants, lodging-houses, theatres and the like; and there is more than a square

mile of these buildings among which we may wander, without counting the miles of wharfage and open spaces piled with iron, timber and such heavy or bulky stuffs as cannot be conveniently housed in large quantities. Cottons, woolens, linens and silks are among the staples of trade here during the brief exchange season in August. Corn, furs, salt, pottery, leather and leather goods, dried fish, everything, in short, is here, like the stock of a "general store" in an American country village, magnified to an enormous scale.

All sorts and conditions of men come here, many to sell, many to buy, and many, like us, just to look on; sometimes, it is said, two hundred thousand people are on these fair grounds at once. Fortunately for hygienic conditions, the government has for the last one hundred and fifty years controlled the management of affairs, and the lighting, sewerage, fire department and police force are all kept in good condition. There is the omnipresent telegraph line, extending the length of the street, and a row of electric poles, as much at home as if they stood in London or New York. Foreigners abound here as much as in Jerusalem or Paris. All day long crowds come and go through these streets and shops like the flow and ebb of a living tide.

Old frequenters of the Fair tell how a Russian tallow merchant sent his son one year to Nijni Novgorod with \$100,000 worth of stock and permission to have a good time. After business was despatched, the young man promptly sold the tallow, but his good time included so much riotous living at the theatres, gambling houses and wine-shops that he had not a kopeck to take home with him—only a good deal of miscellaneous experience. They say that Russians when they begin to throw money about do so in a most reckless, Oriental fashion, and the Fair affords as much opportunity for such brutal extravagance as any raw boy could wish.

Russian textile industries are fast becoming enormously important. Raw cotton is imported in huge quantities and modern mill machinery is being introduced, greatly to the advantage of large classes of working people in Moscow and other large towns. Mill workers are getting rich too. It is said that some factories of this sort pay over 100 per cent., even 180 per cent. dividends. If we should walk around at our leisure among the piles of woven stuffs, we should find some interesting home-woven linens for toweling and similar uses, made by Russian peasant women, and elaborately decorated with primitive embroidered patterns and lace-like effects of drawn thread.

The Fair is always opened with a solemn service of benediction: and, from time to time, sacred pictures are taken about to visit special shops whose proprietors desire to take every means to secure a prosperous season. The

accompanying priests are well paid; the shop takes on temporarily, a holiday air, with candles and green boughs, and then the "ikon" moves on to bless some other shop.

Another interesting place in this great Russian Fair, is the Chinese Row, which is the headquarters of the tea-trade. The Chinese buildings have a Buddhist air about them, and yet they are almost literally in the shadow of that big Russo-Greek Cathedral with its swelling domes and aspiring crosses. Evidently East and West agree to disagree here, and the lion and the lamb amicably tolerate each other. It is a district largely, though not entirely, devoted to Chinese importations, but comparatively few Chinamen are seen. The teas and other goods are handled by their Russian importers.

The Fair is an excellent place in which to get an idea of the material resources of Russia. Mere map acquaintance with the boundaries of Siberia, for instance, might leave us doubtful why the Czar should care so much about possessing that northern land, but when you see in the Fair-booths, the Siberian malachite and lapislazuli and precious stones that all the rest of the world wants to buy, you readjust your ideas of the country. Furs and hides of various sorts also come from Siberia in enormous quantities. The Siberian Hide Market, which is in a portion of the Fair known as the "Village of the Tartars," is interesting not for the curiosity of its sights, but for the multiplicity and intensity of its odors, for the skins one sees, sheep-skins, wolf-skins, bear-skins, foxes and even ermine, have not long been off the backs of their owners. The aproned Tartar-men are descendants of the wild hordes that used to harass the Muscovite princes with their bloody invasions; a peaceful enough sort of Russian subjects at present, though not over clean and not very attractive in their personal appearance. Many of them live through the time of the Fair in huts, scattered about among the piles of skins, taking care of the stock, for it is immensely valuable in spite of its smell.

Siberian rivers on the one hand and the Caucasian Mountains on the other hand used to be worlds apart, but the Russia of to-day is taking advantage of modern inventions. The days of caravans bringing goods overland from the East are steadily retreating into tradition. The railroad train is gradually transforming life in the Czar's dominions. Perhaps it may bring about the abolition of this very Fair. If it were not that Russia is, "in streaks," the most conservative of all civilized countries, this Fair would probably have passed out of existence before now, replaced by some up-to-date system of selling by samples; but, as it is, the institution will probably be kept up for several years. There will be time for us to come again!

A TWENTIETH CENTURY METHOD OF TEACHING.

RESULTS OF ACTUAL EXPERIENCE.

ALVIN E. POPE,

Professor in the Nebraska School for the Deaf, Omaha, Nebraska.

THE best stereographs of to-day are improvements upon the old-fashioned stereoscopic pictures. They are original photographs taken by the most improved methods, and, when viewed through the stereoscope, present a wonderful effect.

Ordinary pictures represent objects to the eye; but the stereograph reproduces them. Common flat pictures are studied as artificial representations of nature, while the stereograph is studied as nature. The stereograph reveals to the eyes, in light and shade, all that they could see if actually in the place of the camera. The view is so realistic that I have several times taken hearing children unawares, while absorbed in studying a beautiful scene, and had them reach out to pluck a flower when told to do For hundreds of years great skill and energy have been employed in the attempt to produce the effect of a third dimension. The eyes can be slightly deceived by an ordinary picture, but the full effect is never produced except by the stereograph. If you doubt this, just study a stereograph without the glass. You get the distance and perspective of an ordinary picture. Apply the glass and you are startled by the reality. You are not really looking at a picture; there is no frame; the scene is bounded only by the visual horizon. You can see as far and as clearly as your eyes will permit. The scene is as large as all out-of-doors; everything is of life-size and of perfect form. This wonderful reproduction of nature offers the only substitute for travel.

Oliver Wendell Holmes, who had one of the largest libraries of stereographs, says of them: "The first effect of looking at a good photograph through the stereoscope is a surprise such as no painting ever produced. The mind feels its way into the very depths of the picture. The craggy branches of a tree in the foreground run out at us as if they would scratch our eyes out. The elbow of a figure stands forth so as to make us almost un-Then there is such a frightful amount of comfortable. detail, that we have the same sense of infinite complexity which nature gives us. A painter shows us masses; the stereoscopic figure spares us nothing; all must be thereevery stick, straw, scratch—as faithfully as the dome of St. Peter's or the summit of Mont Blanc, or the evermoving stillness of Niagara. The sun is no respecter of persons or things. This is one infinite charm of the photographic delineation. Theoretically, a perfect photograph is absolutely inexhaustible. In a picture you can

find nothing which the artist has not seen before you; but in a perfect photograph there will be as many beauties lurking unobserved as there are flowers that blush unseen in the forest and meadows. It is a mistake to suppose one knows a stereoscopic picture when he has studied it a hundred times by the aid of the best of our common instruments."

One of the chief uses we have made of stereographs is in the study of geography. Each pupil is given an improved aluminum stereoscope. The teacher places a stereograph in the first 'scope and places another behind it, removing the front stereograph and placing it in the next stereoscope. Soon each pupil has a stereograph, and, as the teacher walks along the aisles replacing and removing them, the scenes change without the necessity of the children taking their heads from the hoods of the 'scopes, thus avoiding the strain otherwise caused by the constant readjustment of the eyes.

The class are supposed to have completed the study and location of the objects on the school ground, in the school district, the county, and possibly the State. The primary lessons in map-drawing and moulding have been mastered. Now comes the stereograph, like some fairy queen, extending these limitations of the study of objects until the whole world is reproduced to their vision.

If the lesson is about mountains, the teacher gives the preliminary information, and calls attention to particulars to be observed. The stereographs are so assorted that the class are approaching a distant range of mountains. They pass over stretches of prairie, through green valleys, by moving rivers, across wooded hills, until at last they reach a village at the foot of a particular mountain. Ascending, they note the change in the flora and the fauna, study the gorges, cañons, waterfalls, tunnels, and cliffs. They stop by the rushing brook to see the village through the clouds below. They meet parties of adventurers climbing the steep ledges, and, going with them over the deep crevices in the snow and ice, they at last reach the summit. Here they get a view of the surrounding valleys and the neighboring mountains. Then begins the descent; after which follows a general discussion on mountains This is repeated for the next lesson and the class write a description of a trip to the mountains. The general conception of mountains is followed by a study of the details of each particular stereograph. Likewise they study glaciers, explore the valleys, follow rivers to the sea, etc. similar manner they journey through the different countries, keeping their bearings by means of a map. After they get a general idea of the country they begin to investigate the cities, the farms, the mines, and the factories, and study the manners and customs of the people.

Geography can be mastered only by study and travel. Common illustrations are of great value in simplifying the text and giving clear and exact ideas, but the stereograph offers the only substitute for travel. Ordinary pictures are of importance in securing a more definite idea of a mountain; but invariably the children are surprised when they see the real thing, unless they have had the proper training with the stereograph.

Each lesson is preceded by a short talk or lecture, such as you would give the class before going on a journey. The stereographs are studied as though the class were standing in the camera's place, asking questions and receiving answers, comments, and explanations concerning the topics of interest. The purpose of this method is to let the class study the scene themselves; the teacher asking few questions unless they are confused. This is the laboratory method: the pupils must use their own eyes, ask their own questions, and, where possible, find their own information. Further than this, occasional individual assistance is all that is necessary.

By this means the pyramids are brought into the schoolroom. The pupils explore the ice fields of the frozen north and penetrate the jungles of the scorching tropics. The teacher leads them through all the wonders of Europe and the mysteries of the Orient. They visit tombs and monuments, galleries and museums; they study the art and architecture of the different nations and the ruins of fallen monarchies. They associate with people of all races, nations, and occupations, while at home and while at work. They see all that remains of the past, all there is of the present. This lifts their minds from institution gossip and broadens their views, from which they form good, sound conclusions.

I wish no reader to criticise this method without first examining a set of stereographs entitled "A Journey Through the Holy Land," accompanied by Dr. J. L. Hurlbut's guide book, which is interspersed with valuable key maps. Then, and then only, can the educational value of stereographs be realized.

A method is a system of presenting material to the mind so that it will be acquired with greater accuracy, with less effort, and in less time, and simultaneously produce greater and broader mental development. The surplus of time and energy can be employed in further strengthening and developing the mind. In other words, the best method is the most economic means of accomplishing an object in mental development. Anything deviating from this is extravagance and waste, whether it be in the lack

of method or in the abuse of method. The abuse is where the means are mistaken for the object and the pupils are stretched or chopped off to fit the educational cradle. Every teacher should stretch the methods so as to make them of the most service to each child, remembering also that mental development is more important than intellectual cramming.

The most serious problem in the education of the deaf is the teaching of English. The various and unique methods employed in the lower grades soon wear out, and the older pupils are left to grope in confusion. So much time is spent upon word-cramming and sentence-building that the highest and noblest faculties of the mind are apt to be left almost undeveloped, verbal memory often surviving at the expense of imagination and thought; that is, words are remembered without the retention of ideas and the development of the mind. The attention is so focused on sentences that a paragraph is never seen as a whole. No literary appreciation is developed, no use of good and forceful English is attained. Most teachers are horrified even at the attempt to accomplish this. tence-building is very essential; but cannot something be done to develop imagination, strengthen thought, and produce a clear and forcible literary style? Year after year the children are kept at journal writing. minds are narrowed down to the frivolous details of daily life and institution gossip. The only means of progress is the correction of errors, which alone is slow and un-Journal work is an excellent drill; the satisfactory. children must learn to express daily occurrences and daily wants; but how can the abuse of it be avoided and something be introduced to uplift their minds and develop neglected faculties?

In geography the stereograph was introduced as the study of objects became exhausted; likewise in teaching English the stereograph can be used as the primary systems decline, and it offers the only satisfactory solution to the above conditions. The system employed does not propose to overthrow existing methods, but to prevent their abuse and, without interfering with their good results, accomplish important objects which they do not attempt.

Sets of stereographs are arranged to suit the pupils of the different grades from the fourth up. Each set contains about one hundred scenes, and is divided into groups of from ten to twenty stereographs possessing a similarity. The groups, however, differ in the nature of the scenes. A stereograph is selected from each group, and about ten or twelve model stories are written concerning it in a progressive order, beginning with the simple enumeration of objects and ending with a short imaginative story. The models of these groups differ in styles of narration, conversation, description, exposition, etc. The model stereo-

graph is exhibited and the model story is written on the board, explained, copied, and learned, as the teacher sees fit. Each pupil is given a different scene from the same group. The lesson is erased and the class attempt to construct stories of their own, somewhat similiar to the model. It is impossible to rewrite the model story, because it will not fit their scenes. They must learn in the natural way; that is, by imitation, and, at the same time, they must avoid the abuse of verbal memory. There is an ever present ideal slightly beyond their reach, for as soon as one is accomplished there is a new and higher ideal to achieve.

The stereograph offers material for thought; the model stories guide that thought by suggestion, and supply a framework for language construction. New words and idioms are introduced and the old ones repeated. A paragraph is allowed for each central figure in the scene, and an additional one for general conclusions. Each lesson is a model within the pupil's understanding, but slightly beyond his powers of execution. When one model is mastered another is given, and step by step the class progress until they reach a model which seems to be their Then they abandon that group and begin on the next. Each pupil is given the same stereograph until he becomes familiar with all of the objects therein or until he tires of it. Then have him exchange with another pupil. It is possible in this way to have each child complete every stereograph in each group.

Ideas precede expression; otherwise verbal memory predominates and education is crippled. The teacher must control causes which will produce thoughts in the pupil's mind. These thoughts are followed by expression, the quality of which depends upon choice and select reading and continual practice in writing. A good, forceful, and correct use of English can be acquired only by the use of both reading and writing. The child learns by imitation. It is necessary, first, to become familiar with what is to be imitated, and then to do it. The pupils must learn English as it is written, in order to read common English understandingly and become independent in the search for knowledge; otherwise they are lost in whirlpools of confusion when attempting to read a simple book. As the class progress under this method they become more proficient in reading because it is necessary to master the models, which are arranged in progressive order. Their ability to understand English expands as the models enlarge.

It is also very essential to become familiar with English as it is spoken. For this purpose many of the groups are accompanied by model stories prepared in conversational style. The different people in the scenes are talking.

When the child has his head in the hood of the 'scope intently gazing at the lifelike scene, ideas are crowding

upon ideas in his little mind. He becomes enthusiastic in his attempt to express these thoughts, and welcomes any aid with the greatest pleasure. This interest and enthusiasm, together with the advantage of the model stories, will make stronger, deeper, and more lasting impressions than any haphazard plan now in use in the higher grades. The power of expression in the use of written and conversational language, the ability to understand plain English and appreciate simple literature, will be marked by unparalleled improvement.

In some schools the system of word-cramming is pushed to such an extent that many faculties of the mind are neglected, abused, or entirely crushed. Just where to draw the line between the teaching of English and the development of the mental faculties is a problem that deserves the gravest consideration. If one is pursued too far the other must suffer. English is the most essential study; but just how far can we allow it to flourish at the expense of the intellectual faculties? It is true that, to a certain point, English assists the development of the faculties, but it cannot aid them when they are neglected and abused.

The lack of imagination is considered by many authorities as a peculiarity common to the deaf. Others, in their eagerness to press a severe system of word-cramming, slight it or argue that it is unworthy of attention.

There are two kinds of imagination, auricular and visual, and one or the other usually predominates in every mind, but both are present. Almost invariably the visual is greatly in excess. With the deaf only the visual imagination can be developed, but this, like sight, is only intensified and made more sensitive by deafness. The development of a good imagination is one of the most essential features of education. Little that is important in this world is accomplished without a well-trained imaginative mind behind it. If neglected, it will become distorted or diseased; if abused, it may be crushed. Imagination, the mother of originality, is one of the first and strongest faculties of the mind in early life. It should be protected and strengthened, so that it will blossom into originality and ripen into thoughts in later life.

These models are arranged so as to develop a good and strong imagination simultaneously with observation and expression.

No picture displays life size, distance, perspective, solidity, and reality as does the stereograph. No other pictures afford as perfect a representation of nature even to the minutest detail. No other pictures offer such a broad scope for the acquisition of knowledge and the development of expression.

All other pictures are used in a supplementary way to illustrate language, or in a more or less haphazard way to develop æsthetic tastes and to build character. In our

experiments with the stereograph we go one step farther in the evolution of pictures. Here the picture becomes the primary object, and a systematic plan is followed to strengthen character, create a love for art and nature, and a sympathy for humanity. The means employed affords an opportunity to develop a marvelous use of English, and, at the same time, to give instructions in geography, history, and architecture.

MODELS.

These models are not supposed to be perfected yet, but nevertheless they will illustrate the idea of their use. The views of the first group are domestic scenes, children at all sorts of innocent play, accompanied by their favorite This group has a softening effect upon the character and creates a deep sympathy among children. The pictures contain three central figures and enough detail to train their eyes for more advanced work.

MODEL NUMBER ONE.

Teach the names of all the objects with the proper use of the articles and numeral adjectives.

A girl, a doll, a cat, a bed, a table, two chairs, three bottles, some medicine, a glass, a pitcher, a cup, a saucer, a spoon, two

MODEL NUMBER TWO.

Make complete sentences. First teach the use of I see, then There is, and There are.

I see a girl. I see three bottles. I see a doll. I see some medicine. I see a cat. I see a glass.

I see a bed. I see a cup and saucer. I see a table. l see a spoon.

I see two chairs. 1 see two curtains.

MODEL NUMBER THREE.

Teach position. The prepositions used will depend upon the earlier training of the pupils.

I see a girl sitting on a chair.

1 see a doll on the girl's lap.

I see a cat on a bed.

I see three bottles on a table.

I see a glass on the table near the bottles.

I see a spoon in the glass.

I see a pitcher by the glass.

I see a cup and saucer at the left of the pitcher.

I see two curtains on the wall.

MODEL NUMBER FOUR.

This is the first lesson in paragraphing. Teach the use of has and has on, and the pronouns he, she and it.

I see a girl sitting on a chair. She has dark hair. She has brown eyes. She has on a light dress.

I see a doll on the girl's lap. It has light hair. It has on a light dress. It has on white stockings.

I see a cat on the bed. It has black and white fur. It has a white nose. It has a white paw. It has on a black ribbon.

I see a glass, a pitcher, a cup and saucer, and three bottles on a table. A spoon is in the glass. A cork is in one bottle.

MODEL NUMBER FIVE.

Introduce new adjectives.

I see a pretty girl sitting on a chair. She has dark curly hair. She has on a nice clean dress.

l see a doll sitting on her lap. It has light hair. It has on a beautiful white dress and some pretty white stockings.

I see a pretty cat sleeping on a bed. It has beautiful black and white fur. It has a clean paw and a white nose. It has on a nice black ribbon.

I see some dishes on the table and some curtains on the wall.

MODEL NUMBER SIX.

This is the first step in developing the imagination.

I see a pretty little girl sitting on a chair. She has dark curly hair and she wears a nice clean dress. I think her name is Sophia. She is playing with her doll and cat.

The doll wears a beautiful white dress and some pretty white stockings. Her name is Helen. She looks very happy.

The large black and white cat is sleeping on a bed. Its name is Tom. Tom is very lazy; he wants to sleep all the time.

I think Sophia is playing that Tom and Helen are sick. Perhaps she will give them some medicine.

MODEL NUMBER SEVEN.

Sophia is a pretty little girl. She has dark, curly hair and pretty brown eyes. Her dress is nice and clean. She is playing that her doll and cat are sick.

Helen is a beautiful flaxen-haired doll. She wears a pretty white dress and a pair of white stockings. She looks very happy. I do not think she is sick.

The large sleepy cat is on the bed. His name is Tom. He has been hunting mice nearly all night and does not want Sophia to

I should like to play with Sophia, she is such a sweet girl.

MODEL NUMBER EIGHT.

Sophia is a sober little girl. She has long, dark curls and she wears a pretty brown dress. She likes to play with her doll and cat. She is playing that they are sick.

The beautiful flaxen-haired doll's name is Helen. She will not care if Sophia gives her some medicine. Sophia must be careful and not spill the medicine on Helen's nice clean dress.

Tom is a big lazy cat, with beautiful black and white fur. He has been hunting mice nearly all night and wants to sleep now. He will be mad if Helen wakes him up and gives him some medicine.

I should like to play with Sophia and her pets. She is such a nice sweet girl.

MODEL NUMBER NINE.

Sophia is a sober little girl. Her long, dark curls hang about her pretty, fat face. Her beautiful brown dress looks very neat and clean. She likes to play with her doll and cat. She is playing that they are sick. I think she will give them a spoonful of medicine from the glass on the table.

Her pretty flaxen-haired doll is named Helen. She looks very pretty and happy. I do not think she needs any medicine. Sophia must be careful and not spill the medicine on her clean white dress.

Tom is a big lazy cat, with beautiful black and white fur. He has been hunting mice nearly all night and wants to sleep now. He will be mad if Helen wakes him up and gives him some old bitter medicine.

I should like to play with Helen and her pets. I know I should like her very much, she is such a nice sweet girl.

-American Annals of the Deaf.

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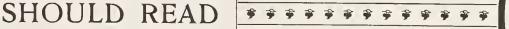
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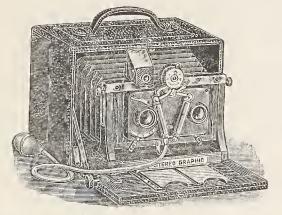
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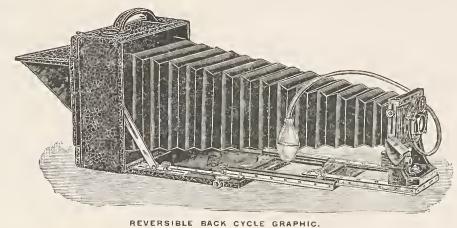
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